
State:	District of Columbia	Filing Company:	Sentinel Insurance Company, Ltd.
TOI/Sub-TOI:	20.0 Commercial Auto/20.0000 Commercial Auto Combinations		
Product Name:	CA 2020 - Sentinel Rate Revision		
Project Name/Number:	Commercial Auto /FN.02.503.2020.01		

Filing at a Glance

Company:	Sentinel Insurance Company, Ltd.
Product Name:	CA 2020 - Sentinel Rate Revision
State:	District of Columbia
TOI:	20.0 Commercial Auto
Sub-TOI:	20.0000 Commercial Auto Combinations
Filing Type:	Rate
Date Submitted:	01/14/2020
SERFF Tr Num:	HART-132214506
SERFF Status:	Submitted to State
State Tr Num:	
State Status:	
Co Tr Num:	FN.02.503.2020.01
Effective Date	01/18/2020
Requested (New):	
Effective Date	01/18/2020
Requested (Renewal):	
Author(s):	Robin Rose, Desiree Dupree, Brenda Clapper
Reviewer(s):	
Disposition Date:	
Disposition Status:	
Effective Date (New):	
Effective Date (Renewal):	

State: District of Columbia
TOI/Sub-TOI: 20.0 Commercial Auto/20.0000 Commercial Auto Combinations
Product Name: CA 2020 - Sentinel Rate Revision
Project Name/Number: Commercial Auto /FN.02.503.2020.01

Filing Company: Sentinel Insurance Company, Ltd.

General Information

Project Name: Commercial Auto
Project Number: FN.02.503.2020.01
Reference Organization: ISO
Reference Title: DC REVISION OF COMMERCIAL AUTO LIABILITY INCREASED LIMIT AND DEDUCTIBLE DISCOUNT FACTORS TO BE IMPLEMENTED ~ DC REVISED COMMERCIAL AUTO ADVISORY PROSPECTIVE LOSS COSTS, INCLUDING NONOWNERSHIP LIABILITY COMPANY ACTION BLOCK UPDATED
Filing Status Changed: 01/14/2020
State Status Changed:
Created By: Brenda Clapper
Corresponding Filing Tracking Number:

Status of Filing in Domicile:
Domicile Status Comments:
Reference Number: CA-2018-IALL1 ~ CA-2019-BRLA1
Advisory Org. Circular: LI-CA-2018-150 ~ LI-CA-2019-173
Deemer Date:
Submitted By: Brenda Clapper

Filing Description:

This filing proposes to revise Commercial Auto base rates to produce an average premium level impact of +6.1% effective 1/18/2020.

This filing proposes to:

- ~ Implement new Loss Cost Multipliers.
- ~ Implements new Loss Cost Multipliers to produce revised base rates
- ~ Adopt ISO Liability Deductible Factors from CA-2018-IALL1
- ~ Revise Publics Bus Not Otherwise Classified Classification Factors
- ~ Revise Employed Non-Owned Liability (ENOL) base rates

Company and Contact

Filing Contact Information

Brenda Clapper, Senior Product Consultant brenda.clapper@thehartford.com
One Hartford Plaza
T-9
Hartford, CT 06155

860-547-6383 [Phone]
860-547-5941 [FAX]

Filing Company Information

Sentinel Insurance Company, Ltd.	CoCode: 11000	State of Domicile: Connecticut
Hartford Plaza	Group Code: 91	Company Type: Property
Hartford, CT 06155	Group Name: The Hartford Ins.	State ID Number:
(860) 547-5000 ext. [Phone]	Group	
	FEIN Number: 06-1552103	

Filing Fees

Fee Required? No
Retaliatory? No
Fee Explanation:

State:	District of Columbia	Filing Company:	Sentinel Insurance Company, Ltd.
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Project Name/Number:	Commercial Auto /FN.02.503.2020.01		

Correspondence Summary

Amendments

Schedule	Schedule Item Name	Created By	Created On	Date Submitted
Rate	40. PUBLIC AUTO CLASSIFICATIONS	Brenda Clapper	01/16/2020	01/16/2020

State:	District of Columbia	Filing Company:	Sentinel Insurance Company, Ltd.
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Amendment Letter

Submitted Date: 01/16/2020

Comments:

Per the Actuarial Memo we have attached the Revised Rule page for our Bus Not Otherwise Classified Classification Factors.

Thank You,

Changed Items:

No Form Schedule Items Changed.

Rate Schedule Item Changes					
Item No.	Exhibit Name	Rule # or Page #	Rate Action	Previous State Filing Number	Date Submitted
1	40. PUBLIC AUTO CLASSIFICATIONS	RU_4.40_CA-DC-2020-RU-501	Replacement		01/16/2020 By:

No Supporting Documents Changed.

State:	District of Columbia	Filing Company:	Sentinel Insurance Company, Ltd.
TOI/Sub-TOI:	20.0 Commercial Auto/20.0000 Commercial Auto Combinations		
Product Name:	CA 2020 - Sentinel Rate Revision		
Project Name/Number:	Commercial Auto /FN.02.503.2020.01		

Rate Information

Rate data applies to filing.

Filing Method:	File & Use
Rate Change Type:	Increase
Overall Percentage of Last Rate Revision:	6.200%
Effective Date of Last Rate Revision:	01/12/2019
Filing Method of Last Filing:	File & Use
SERFF Tracking Number of Last Filing:	

Company Rate Information

Company Name:	Overall % Indicated Change:	Overall % Rate Impact:	Written Premium Change for this Program:	Number of Policy Holders Affected for this Program:	Written Premium for this Program:	Maximum % Change (where req'd):	Minimum % Change (where req'd):
Sentinel Insurance Company, Ltd.	21.900%	6.100%	\$19,443	65	\$318,745	50.000%	2.700%

State:	District of Columbia	Filing Company:	Sentinel Insurance Company, Ltd.
TOI/Sub-TOI:	20.0 Commercial Auto/20.0000 Commercial Auto Combinations		
Product Name:	CA 2020 - Sentinel Rate Revision		
Project Name/Number:	Commercial Auto /FN.02.503.2020.01		

Rate/Rule Schedule

Item No.	Schedule Item Status	Exhibit Name	Rule # or Page #	Rate Action	Previous State Filing Number	Attachments
1		Sentinel Rate Pages	CA-HR-1 thru CA-HR-26	Replacement		SIC Rate Pages.pdf
2		40. PUBLIC AUTO CLASSIFICATIONS	RU_4.40_CA-DC-2020-RU-501	Replacement		RU_4.40_CA-DC-2020-RU-501.pdf

**COMMERCIAL LINES MANUAL
DIVISION ONE - AUTOMOBILE
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8. POLICY WRITING MINIMUM PREMIUM
--

- | | |
|---------------------------|-------|
| A. Prepaid Policies | \$250 |
| B. Annual Premium Payment | \$250 |
| Plan Policies or | |
| Continuous Policies | |

9. ADDITIONAL PREMIUM CHANGES

- B. Waive additional premium of \$15 or less.

10. RETURN PREMIUM CHANGES

- B. Waive return premium of \$15 or less.

23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS

[illegible]

EDITION: 01/2020

23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS
NOT USED IN DUMPING OPERATIONS
LOCAL AND INTERMEDIATE-ALL VEHICLES
LONG DISTANCE-LIGHT TRUCKS AND TRAILERS USED WITH LIGHT TRUCKS

Subline Code (618)

PHYSICAL DAMAGE
OCN \$15,001-20,000

	Specified Causes of Loss	\$500 Coverage Comprehensive	\$500 Deductible Collision		Specified Causes of Loss	500 Coverage Comprehensive	\$500 Deductible Collision		Specified Causes of Loss	500 Coverage Comprehensive	\$500 Deductible Collision
	(020)	Coverage Code (726)	(077)		(020)	Coverage Code (726)	(077)		(020)	Coverage Code (726)	(077)
Territory				Territory				Territory			
001	107	150	341								

For physical damage fleet factors, refer to Rule 22.
For additional coverages, refer to the Additional Coverages table for Rule 23.
For deductible factors, refer to Rule 98.
For OCN and Age Group factors, refer to Rule 101.
For trucks and trailers used in dumping operations and all truck-tractors, multiply the collision premium by 1.25.
For stated Amount factors, refer to Rule 101.

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Legal Liability Rates for Physical Damage
To Trailers Under A Trailer Interchange Agreement

Daily Per Trailer Base Rates

24. TRUCKERS/MOTOR CARRIERS

Legal Liability For Physical Damage To Trailers Under A Trailer Interchange Agreement															
Daily Per Trailer Base Rates															
	Local					Intermediate					Long Distance				
Limit of Liability	No Ded Comp or Specified Causes of Loss	Collision Deductibles				No Ded Comp or Specified Causes of Loss	Collision Deductibles				No Ded Comp or Specified Causes of Loss	Collision Deductibles			
		\$100	\$250	\$500	\$1,000		\$100	\$250	\$500	\$1,000		\$100	\$250	\$500	\$1,000
\$1,000	.008	.106	.055	.044	.027	.015	.169	.091	.070	.042	.023	.262	.138	.109	.065
2,000	.015	.114	.065	.052	.034	.023	.188	.107	.086	.052	.035	.289	.164	.133	.082
3,000	.018	.126	.077	.062	.039	.029	.205	.122	.099	.064	.047	.315	.190	.154	.097
4,000	.023	.136	.086	.070	.047	.037	.220	.139	.114	.074	.057	.339	.213	.176	.114
5,000	.029	.146	.096	.081	.052	.044	.237	.154	.129	.086	.069	.366	.238	.200	.129
6,000	.032	.156	.106	.091	.059	.052	.253	.173	.146	.096	.079	.393	.263	.223	.148
7,000	.037	.168	.114	.099	.065	.060	.272	.188	.159	.106	.092	.418	.289	.247	.163
8,000	.042	.178	.126	.107	.070	.067	.290	.203	.173	.116	.104	.445	.312	.268	.180
9,000	.047	.188	.136	.116	.077	.074	.305	.220	.190	.128	.114	.470	.337	.290	.195
10,000	.050	.198	.146	.126	.086	.082	.322	.235	.205	.138	.126	.495	.362	.315	.213
11,000	.055	.210	.154	.136	.092	.089	.339	.253	.220	.149	.136	.522	.388	.337	.228
12,000	.060	.220	.166	.144	.097	.097	.356	.270	.235	.159	.149	.549	.414	.361	.245
13,000	.064	.230	.176	.154	.104	.104	.374	.285	.250	.169	.159	.575	.438	.383	.260
14,000	.069	.240	.186	.163	.111	.111	.389	.300	.263	.180	.171	.599	.463	.406	.277
15,000	.072	.250	.195	.173	.117	.119	.408	.317	.278	.191	.183	.626	.488	.429	.294
16,000	.079	.260	.205	.181	.124	.126	.424	.334	.294	.201	.195	.653	.513	.451	.310
17,000	.082	.272	.216	.191	.129	.134	.441	.349	.310	.213	.206	.678	.537	.476	.325
18,000	.087	.282	.225	.198	.136	.141	.458	.366	.324	.223	.218	.705	.562	.497	.342
19,000	.092	.290	.235	.208	.143	.149	.473	.381	.337	.232	.228	.730	.587	.520	.357
20,000	.096	.302	.245	.216	.151	.156	.492	.398	.352	.243	.240	.755	.612	.544	.374
Additional Charges Added For Every \$1,000 Liability In Excess Of \$20,000															
	\$.003	.012	.010	.010	.007	\$.007	.017	.015	.015	.012	\$.012	.027	.025	.023	.017

Table 24.B.2.b.(2)(b) Trailer Interchange Agreement Base Rates

Liability Minimum Premium
\$30

Table 24.C.2.b.(5) Cost Of Hire Basis Liability Minimum Premium

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DIVISION ONE - AUTOMOBILE
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25. PREMIUM DEVELOPMENT - ZONE-RATED AUTOS

Zone-Rating Table - Zone 02 (Baltimore/Washington) Combinations						
Zone	Description	Code	\$100,000 Liability	\$500 Medical Payments	\$500 Deductible Collision	\$500 Deductible Comprehensive
01	Atlanta	401	2469	84	597	226
02	Baltimore/Washington	402	2407	82	580	240
03	Boston	403	2337	79	513	226
04	Buffalo	404	2407	82	580	240
05	Charlotte	405	2469	84	597	226
06	Chicago	406	2288	77	528	208
07	Cincinnati	407	2288	77	528	208
08	Cleveland	408	2288	77	528	208
09	Dallas/Fort Worth	409	3201	109	812	226
10	Denver	410	2815	96	565	284
11	Detroit	411	2288	77	528	208
12	Hartford	412	2337	79	513	226
13	Houston	413	3201	109	812	226
14	Indianapolis	414	2288	77	528	208
15	Jacksonville	415	2469	84	597	226
16	Kansas City	416	2335	79	510	235
17	Little Rock	417	3201	109	812	226
18	Los Angeles	418	3364	114	768	300
19	Louisville	419	2345	81	530	322
20	Memphis	420	2345	81	530	322
21	Miami	421	2469	84	597	226
22	Milwaukee	422	2335	79	510	235
23	Minneapolis/St. Paul	423	2335	79	510	235
24	Nashville	424	2345	81	530	322
25	New Orleans	425	2877	97	654	243
26	New York City	426	2407	82	580	240
27	Oklahoma City	427	3201	109	812	226
28	Omaha	428	2335	79	510	235
29	Phoenix	429	2815	96	565	284
30	Philadelphia	430	2407	82	580	240
31	Pittsburgh	431	2407	82	580	240
32	Portland	432	3364	114	768	300
33	Richmond	433	2469	84	597	226
34	St. Louis	434	2335	79	510	235
35	Salt Lake City	435	2815	96	565	284
36	San Francisco	436	3364	114	768	300
37	Tulsa	437	3201	109	812	226
40	Pacific	440	3451	117	768	317
41	Mountain	441	2889	99	565	299
42	Midwest	442	2396	82	510	247
43	Southwest	443	3285	112	812	238
44	North Central	444	2349	81	528	218
45	Mideast	445	2407	82	530	339
46	Gulf	446	2953	101	654	255
47	Southeast	447	2533	86	597	238
48	Eastern	448	2469	84	580	253
49	New England	449	2397	82	513	238

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DIVISION ONE-AUTOMOBILE
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32. PRIVATE PASSENGER TYPES

[illegible]

For liability increased limits factors, refer to Rule 100.
For liability fleet factors, refer to Rule 22.
For Madical Payments, refer to Rule 92, as applicable.

32. PRIVATE PASSENGER TYPES

Subline Code (618)

PHYSICAL DAMAGE
OCN \$15,001 - 20,000

	\$500 Deductible Comprehensive	\$500 Deductible Collision		\$500 Deductible Comprehensive	\$500 Deductible Collision		\$500 Deductible Comprehensive	\$500 Deductible Collision
	Coverage Code (726) (077)			Coverage Code (726) (077)			Coverage Code (726) (077)	
Territory			Territory			Territory		
001	174	749						

For additional Coverages, refer to the additional coverages table in Rule 23.
For deductible factors, refer to Rule 98.
For OCN and Age Group factors, refer to Rule 101.
For stated Amount factors, refer to Rule 101.

34. TOWING AND LABOR COSTS

Premium - \$15.00 per car.

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DIVISION ONE-AUTOMOBILE
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40. PUBLIC AUTO CLASSIFICATIONS

TAXIS & LIMOUSINES

[illegible]

For liability increased limits factors, refer to Rule 100.
For liability fleet factors, refer to Rule 39.
For Madical Payments, refer to Rule 92, as applicable.

40. PUBLIC AUTO CLASSIFICATIONS SCHOOL & CHURCH BUSES

For liability increased limits factors, refer to Rule 100.
For liability fleet factors, refer to Rule 39.
For Madical Payments, refer to Rule 92, as applicable.

40. PUBLIC AUTO CLASSIFICATIONS

ALL OTHER BUSES

[illegible]**EDITION: 01/2020**

40. PUBLIC AUTO CLASSIFICATIONS

VAN POOLS

[illegible]

For liability increased limits factors, refer to Rule 100.
For liability fleet factors, refer to Rule 39.
For Madical Payments, refer to Rule 92, as applicable.

40. PUBLIC AUTO CLASSIFICATIONS TAXIS, LIMOUSINES, AND VANPOOLS

PHYSICAL DAMAGE
OCN \$15,001-20,000

	Specified Causes of Loss	\$500 Coverage Comprehensive	\$500 Deductible Collision		Specified Causes of Loss	500 Coverage Comprehensive	\$500 Deductible Collision		Specified Causes of Loss	500 Coverage Comprehensive	\$500 Deductible Collision
	(020)	Coverage Code (726)	(077)		(020)	Coverage Code (726)	(077)		(020)	Coverage Code (726)	(077)
Territory				Territory				Territory			
001	98	138	434								

EDITION: 01/2020

40. PUBLIC AUTO CLASSIFICATIONS SCHOOL, CHURCH, AND ALL OTHER BUSES

Subline Code (618)

PHYSICAL DAMAGE
OCN \$15,001-20,000

	Specified Causes of Loss	\$500 Coverage Comprehensive	\$500 Deductible Collision		Specified Causes of Loss	500 Coverage Comprehensive	\$500 Deductible Collision		Specified Causes of Loss	500 Coverage Comprehensive	\$500 Deductible Collision
	Coverage Code				Coverage Code				Coverage Code		
	(020)	(726)	(077)		(020)	(726)	(077)		(020)	(726)	(077)
Territory				Territory				Territory			
001	68	94	221								

For physical damage fleet factors, refer to Rule 39.
For additional coverages, refer to the Additional Coverages table for Rule 40.
For deductible factors, refer to Rule 98.
For OCN and Age Group factors, refer to Rule 101.
For stated Amount factors, refer to Rule 101.

49. AUTO DEALERS - PREMIUM DEVELOPMENT

[illegible]

Use aggregate limit indicator Code (3). For additional limits, refer to Rule 49.

COMMERCIAL LINES MANUAL
DIVISION ONE - AUTOMOBILE
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49. AUTO DEALERS - PREMIUM DEVELOPMENT

Acts, Errors Or Omissions Base Loss Cost
94

Table 49.D.2.a. Acts, Errors Or Omissions Liability Coverages Loss Cost

Mileage	Liability Base Rate Per Driver, Per Trip
51 - 200 Miles	13
Over 200 Miles	18

Table 49.E.1. Pick Up Or Delivery Of Autos Base Rates

Limit	Base Rate Per \$100 Of Inventory Value
25,000	0.03
50,000	0.05
100,000	0.07

Table 49.I. False Pretense Base Rates

Individual Coverage Drive-away Collision Per Car, Per Trip												
Price New At Factory To Dealer	Base Rates For Mileage And Deductible - All Territories, Types, Makes And Age Groups											
	0 - 500 Miles			501 - 1,000 Miles			1,001 - 1,500 Miles			Over 1,500 Miles		
	\$100	\$250	\$500	\$100	\$250	\$500	\$100	\$250	\$500	\$100	\$250	\$500
	\$ 0 - 7,500	7.48	4.46	3.36	12.43	7.48	5.59	16.54	9.93	7.43	20.70	12.43
7,501 - 15,000	10.77	6.48	4.85	17.90	10.72	8.07	23.86	14.33	10.74	29.85	17.90	13.44
15,001 - 25,000	15.01	8.99	6.76	24.90	14.96	11.21	33.15	19.91	14.91	41.40	24.88	18.64
25,001 - 40,000	18.20	10.92	8.17	30.26	18.20	13.62	40.26	24.16	18.12	50.35	30.21	22.66
40,001 - 65,000	25.45	15.28	11.46	42.36	25.42	19.06	56.39	33.82	25.38	70.46	42.28	31.71
Over \$65,000	31.86	19.13	14.34	52.98	31.79	23.84	70.46	42.28	31.71	88.06	52.83	39.64

Table 49.K.1. Individual Coverage Drive-away Collision Base Rates

Blanket Coverage Drive-away Collision Per Car, Per Trip												
Price New At Factory To Dealer	Base Rates For Mileage And Deductible – All Territories, Types, Makes And Age Groups											
	51 - 500 Miles			501 - 1,000 Miles			1,001 - 1,500 Miles			Over 1,500 Miles		
	\$100	\$250	\$500	\$100	\$250	\$500	\$100	\$250	\$500	\$100	\$250	\$500
	\$ 0 - 7,500	3.83	2.32	1.71	6.26	3.72	2.82	8.34	5.02	3.76	10.35	6.19
7,501 - 15,000	5.39	3.24	2.43	8.99	5.39	4.04	11.94	7.20	5.39	14.96	8.99	6.74
15,001 - 25,000	7.48	4.46	3.36	12.52	7.48	5.65	16.54	9.93	7.43	20.70	12.43	9.33
25,001 - 40,000	9.14	5.47	4.11	15.17	9.14	6.83	20.13	12.06	9.06	25.15	15.10	11.32
40,001 - 65,000	12.80	7.68	5.75	21.21	12.72	9.55	28.18	16.91	12.68	35.23	21.14	15.85
Over \$65,000	15.97	9.58	7.18	26.54	15.92	11.94	35.23	21.14	15.85	44.07	26.44	19.81

Table 49.K.2. Blanket Coverage Drive-away Collision Base Rates

**COMMERCIAL LINES MANUAL
DIVISION ONE - AUTOMOBILE
RATE PAGE**

49. AUTO DEALERS - PREMIUM DEVELOPMENT

For non-franchised dealers, multiply the rates displayed on this page by 1.10

Subline Code (618)

FIRE RATE Coverage Code (011)

\$0.18

FIRE AND THEFT RATES Coverage Code (012)

*Theft is subject to a \$100 per car/\$500 per occurrence deductible.

Territory Code	Building and Standard Open Lots	Non-Standard Open Lots	Miscellaneous Types listed in this rule
ALL TERRITORIES	\$0.94	\$1.12	\$0.69
*Optional Deductibles:	\$250 per car and \$1,000 per occurrence - Multiply the above by .90 \$500 per car and \$2,500 per occurrence - Multiply the above by .75		

SPECIFIED PERILS Coverage Code (020)

*Theft and Mischief or Vandalism are subject to a \$100 per car/\$500 per occurrence deductible

Territory Code		Open Lots		Miscellaneous Types listed in this rule	
		Standard Open Lots	Non-Standard Open Lots	Buildings	Open Lots
ALL TERRITORIES	\$1.28	\$1.38	\$1.58	\$1.04	\$1.14
*Optional Deductibles:	\$250 per car and \$1,000 per occurrence - Multiply the above by .90 \$500 per car and \$2,500 per occurrence - Multiply the above by .75				

LIMITED SPECIFIED PERILS Coverage Code (021)

*Theft is subject to a \$100 per car/\$500 per occurrence deductible.

Territory Code		Open Lots		Miscellaneous Types listed in this rule	
		Standard Open Lots	Non-Standard Open Lots	Buildings	Open Lots
ALL TERRITORIES	\$1.19	\$1.28	\$1.46	\$0.96	\$1.04
*Optional Deductibles:	\$250 per car and \$1,000 per occurrence - Multiply the above by .90 \$500 per car and \$2,500 per occurrence - Multiply the above by .75				

**COMMERCIAL LINES MANUAL
DIVISION ONE - AUTOMOBILE
RATE PAGE**

49. AUTO DEALER - PREMIUM DEVELOPMENT

For non-franchised dealers, multiply the rates displayed on this page by 1.10.

Subline Code (618)

COMPREHENSIVE RATES Coverage Code (201)

*Theft and Mischief or Vandalism are subject to a \$100 per car/\$500 per occurrence deductible

Territory Code	Buildings	Standard Open Lots	Non-Standard Open Lots	Miscellaneous Types listed in this rule
ALL TERRITORIES	\$1.46	\$1.59	\$1.80	\$1.38

*Optional Comprehensive Deductibles

\$250 per car and \$1,000 per occurrence - multiply the above rates by .90 (Coverage Code 202)

\$500 per car and \$2,500 per occurrence - multiply the above rates by .75 (Coverage Code 203)

BLANKET COLLISION RATES

Deductible and Coverage Code	* Reporting Form - Total of Values Reported Each Month or Quarter * Non-Reporting Form - Total of Limits of Liability * In Rating Territories Having the Same Collision Rate Level		
	First \$50,000 and under	\$50,001-\$100,000	Over \$100,000
\$100 (074)	\$6.38	\$2.58	\$0.89
\$250 (076)	\$3.74	\$1.41	\$0.64

See Rule 98 for Deductibles not shown above.

50. AUTOMOBILE DEALERS - ADDITIONAL PROVISIONS

Truth in Lending coverage and Odometer coverage may be provided. Charge the following premiums.

Liability Premium	Truth in Lending Charge*	Odometer Charge*
\$ 0-500	\$50	\$50
501-2000	65	65
2001-4000	85	85
4001-7000	115	115
7001-15,000	145	145
15,001-30,000	1% of Liab. Prem.	1% of Liab. Prem.
Over 30,000	Refer to Co.	Refer to Co.

*The limit of liability for those coverages at the premium levels indicated are to be the same as the Liability insurance provided by the policy subject to a maximum \$300,000.
(Note: Premiums are already increased for limits- do not apply increased limits factors.)

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55. GARAGEKEEPERS' INSURANCE - PREMIUM DEVELOPMENT

Subline Code (618)

GARAGEKEEPERS' PREMIUMS - OTHER THAN COLLISION				
*Theft and Mischief or Vandalism losses are subject to a \$100per car/\$500 per occurrence deductible.				
Maximum Limit of Liability	*SPECIFIED PERILS		*COMPREHENSIVE	
	Legal Liability	Direct (Primary)	Legal Liability	Direct (Primary)
	Coverage Codes		Coverage Codes	
	(214)	(215)	(211)	(212)
6,000	30	40	37	49
7,500	35	47	42	57
9,000	40	55	49	65
12,000	50	67	60	81
15,000	59	79	70	96
18,000	65	89	79	106
22,500	79	107	96	128
30,000	99	134	119	161
37,500	117	158	141	190
45,000	134	180	159	216
60,000	164	221	198	267
75,000	195	262	233	314
90,000	223	302	268	362
120,000	275	371	330	446
150,000	322	436	388	522
180,000	372	502	446	602
225,000	446	604	537	725
300,000	565	763	679	916
375,000	686	926	824	1111
450,000	804	1084	965	1302
600,000	1028	1387	1233	1666
750,000	1246	1683	1496	2020
900,000	1460	1970	1750	2364
1,200,000	1860	2511	2233	3015
1,500,000	2223	3000	2667	3600
2,000,000	2515	3396	3018	4073
2,500,000	2740	3698	3286	4437
Over 2,500,000	Refer to Company			
Direct Coverage (Excess)			Premium Computation	
Specified Perils (216)			Multiply the coverage 214 premium by 1.15	
Comprehensive (213)			Multiply the coverage 211 premium by 1.15	

*Theft and Mischief or Vandalism losses are subject to a \$100 per car
and \$500 per occurrence deductible applying to each loss.

Optional Deductibles

\$250 per car and \$1,000 per occurrence-Multiply the above rates by .90.

\$500 per car and \$2,500 per occurrence-Multiply the above rates by .75.

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55. GARAGEKEEPERS' INSURANCE - PREMIUM DEVELOPMENT

Subline Code (618)

GARAGEKEEPERS' PREMIUMS - COLLISION						
Maximum Limit of Liability	Deductibles					
	\$100		\$250		\$500	
	Legal Liability	Direct (Primary)	Legal Liability	Direct (Primary)	Legal Liability	Direct (Primary)
Coverage Codes		Coverage Codes		Coverage Codes		
	(311)	(312)	(311)	(312)	(311)	(312)
6,000	55	75	35	49	29	37
7,500	64	87	42	57	32	44
9,000	74	99	47	64	37	49
12,000	92	126	60	82	47	62
15,000	111	149	72	97	55	75
18,000	131	178	86	116	65	89
22,500	154	208	101	136	77	104
30,000	198	267	129	174	99	134
37,500	233	315	151	205	116	158
45,000	262	354	171	230	131	178
60,000	329	445	215	289	164	223
75,000	396	535	258	347	198	267
90,000	455	614	295	399	226	307
120,000	569	767	369	498	284	384
150,000	683	921	443	599	341	460
180,000	787	1062	512	690	393	532
225,000	941	1270	612	825	471	636
300,000	1198	1617	778	1050	599	809
375,000	1451	1959	943	1273	725	980
450,000	1701	2297	1106	1493	851	1149
600,000	2196	2966	1428	1928	1099	1483
750,000	2684	3622	1745	2355	1342	1812
900,000	3141	4241	2042	2756	1570	2121
1,200,000	3994	5394	2597	3506	1998	2696
1,500,000	4790	6467	3114	4204	2396	3233
2,000,000	5466	7380	3553	4796	2733	3689
2,500,000	5956	8041	3872	5226	2978	4020
Over 2,500,000	Refer to Company					
Direct Coverage (Excess) Collision (313)			Premium Computation Multiply the coverage 311 premium by 1.15			

For additional coverages, refer to the company.

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66. ANTIQUE AUTOS (Class Code 9620)

Coverage	Base Rate Per \$100 Of Insurance With \$50 Ded.
Fire	0.27
Fire and Theft	0.54
Comprehensive	0.94
Collision	0.82

Table 66.B.2. Antique Autos Physical Damage Base Rates

70. FINANCED AUTOS

Single Interest Coverage								
Original Unpaid Balance Including Finance Charges	Comprehensive		Collision		Fire And Theft		Conversion, Embezzlement And Secretion	
	New	Used	New	Used	New	Used	New	Used
\$0 - 1500	15	15	50	54	7	8	7	8
1501 - 2000	15	17	55	59	8	10	8	10
2001 - 2500	18	18	65	69	10	10	10	10
2501 - 3000	20	22	75	79	12	12	12	12
3001 - 3500	23	25	86	91	13	15	13	15
3501 - 4000	27	29	97	102	15	15	15	15
4001 - 4500	29	30	104	111	15	18	15	18
4501 - 5000	34	35	121	128	18	20	18	20
5001 - 6000	40	42	141	149	22	23	22	23
6001 - 8000	52	54	186	196	29	32	29	32
Over 8000 Per \$100	0.72	0.77	2.63	2.78	0.40	0.44	0.40	0.44

Table 70.C.1.a. Single Interest Coverage Base Rates

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75. LEASING OR RENTAL CONCERNS

Vehicle Type	Base Rates Per \$100 Of Insurance
Trucks, Tractors and Trailers	1.04
All Others	5.17

Table 75.B.3.b. Conversion, Embezzlement Or Secretion Base Rates

77. MOTORCYCLES

Coverage	Base Rate Per \$100 Of Insurance
Fire	0.59
Fire And Theft	1.96

Table 77.B.4.a.(2) Motorcycles Fire, Fire And Theft Physical Damage Base Rates

79. REPOSSESSED AUTOS

Liability Base Rate Per Repossessed Auto
6.44

Table 79.B.1.a. Repossessed Autos Liability Base Rate

Liability Minimum Premium
40

Table 79.B.1.d. Repossessed Autos Liability Minimum Premium

80. SNOWMOBILES

Liability Coverage Option	Liability Base Base Rate
Passenger Hazard Excluded	45
Passenger Hazard Included	104

Table 80.B.1. Snowmobiles Liability Base Rates

\$500 Limit Medical Payments Base Rate
10

Table 80.B.2. Snowmobiles Medical Payments Base Rate

Coverage	Base Rate Per \$100 Of Insurance With \$100 Ded.
Comprehensive	
Excludes Breaking Through Ice	1.54
Includes Breaking Through Ice	2.06
Collision	2.06

Table 80.B.5. Snowmobiles Physical Damage Base Rates

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89. NON-OWNERSHIP LIABILITY

Class Code	Total Number Of Employees	Liability Base Rate
6638	0-9	130
6639	10-19	162
6640	19-25	195
6602	26 - 100	345
6603	101 - 500	616
6604	501 - 1,000	972
6605	Over 1,000	2,177

Table 89.C.1.a.(1) Other Than Garage Service Operations Base Rates

Liability Base Rate Per Volunteer
3

Table 89.C.2.b. Social Service Agency Volunteers Liability Base Rate

Liability Base Rate Per Volunteer Donor
0.72

Table 89.C.2.d. Blanket Individual Liability Of Volunteers Base Rate

Liability Minimum Premium
15

Table 89.C.2.e. Social Service Agency Risks Liability Minimum Premium

90. HIRED AUTOS

Cost of Hire Basis - All Territories Liability Base Rate
\$3.25

Table 90.B.3.b. Cost Of Hire Basis Liability Base Rate

Liability Minimum Base Premium
\$300

Table 90.B.3.g. Hired Autos Liability Minimum Base Premium

Comprehensive	Rate per \$100 Annual
\$500 Deductible	0.55
\$1000 Deductible	0.51
\$2000 Deductible	0.47

Table 90.C.3.c. Hired Autos Comprehensive Coverage

Collision	Rate per \$100 Annual
\$500 Deductible	0.84
\$1000 Deductible	0.78
\$2000 Deductible	0.73

Table 90.C.3.c. Hired Autos Collision Coverage

Physical Damage Minimum Premium
100

Table 90.C.3.e. Hired Autos Physical Damage Minimum Premium

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94. RENTAL REIMBURSEMENT

Coverage	Base Rate Per \$100 Of Insurance
Specified Causes of Loss	1.29
Comprehensive	1.54
Collision	2.58

Table 94.B.3. Rental Reimbursement Physical Damage Base Rates

95. AUDIO, VISUAL AND DATA ELECTRONIC EQUIPMENT

Added Limits For Audio, Visual And Data Electronic Equipment	Base Rate Per Auto
500	34
1,000	67
1,500	101
2,000	134
2,500	168
3,000	201
3,500	235
4,000	268
4,500	302
5,000	336
5,500	369
6,000	403
6,500	436
7,000	470
7,500	503
8,000	537
8,500	570
9,000	604
9,500	638
10,000	671

Table 95.B.2.a. Audio, Visual And Data Electronic Equipment Base Rates

96. TAPES, RECORDS AND DISCS COVERAGE

Base Rate Per Auto
15

Table 96.B. Tapes, Records And Discs Comprehensive Base Rate

97. UNINSURED MOTORISTS INSURANCE

Uninsured and Underinsured Motorists Bodily Injury and Property Damage		
Bodily Injury Limits	Private Passenger Types Per Exposure	Other Than Private Passenger Types Per Exposure
55,000	125	129
60,000	131	133
100,000	162	160
125,000	179	174
150,000	193	185
200,000	216	204
250,000	234	219
300,000	249	231
325,000	256	236
350,000	262	241
400,000	273	250
500,000	293	265
600,000	307	276
750,000	325	290
1,000,000	348	308
1,500,000	380	331
2,000,000	400	346

**Table 97.B.1.a. Single Limits Uninsured and Underinsured Motorists Bodily Injury
And Property Damage Coverage Base Rates**

Uninsured Motorists Bodily Injury and Property Damage		
Bodily Injury Limits	Private Passenger Types Per Exposure	Other Than Private Passenger Types Per Exposure
55,000	66	90
60,000	67	92
100,000	78	105
125,000	82	111
150,000	86	116
200,000	92	124
250,000	97	129
300,000	101	134
325,000	102	136
350,000	103	137
400,000	106	141
500,000	110	146
600,000	113	150
750,000	117	155
1,000,000	121	160
1,500,000	126	167
2,000,000	129	170

Table 97.B.1.b. Single Limits Uninsured Motorists Bodily Injury

97. UNINSURED MOTORISTS INSURANCE

Uninsured And Underinsured Motorists Bodily Injury		
Bodily Injury Limits	Private Passenger Types Per Exposure	Other Than Private Passenger Types Per Exposure
25,000/50,000	72	75
50,000/100,000	106	105
100,000/300,000	151	142
250,000/500,000	217	196
500,000/500,000	269	237
500,000/1,000,000	273	240
1,000,000/1,000,000	324	279

Table 97.B.1.c. Split Limits Uninsured And Underinsured Motorists Bodily Injury Coverage Base Rates

Uninsured Motorists Bodily Injury		
Bodily Injury Limits	Private Passenger Types Per Exposure	Other Than Private Passenger Types Per Exposure
25,000/50,000	45	58
50,000/100,000	57	73
100,000/300,000	72	91
250,000/500,000	89	113
500,000/500,000	100	127
500,000/1,000,000	101	128
1,000,000/1,000,000	111	141

Table 97.B.1.d. Split Limits Uninsured Motorists Bodily Injury Coverage Base Rates

97. UNINSURED MOTORISTS INSURANCE

Uninsured And Underinsured Motorists		
Property Damage		
Property Damage Limits	Private Passenger Types Per Exposure	Other Than Private Passenger Types Per Exposure
5,000	17	24
10,000	23	31
25,000	35	40
50,000	46	49
100,000	61	59

Table 97.B.1.e. Split Limits Uninsured And Underinsured Motorists
Property Damage Coverage Base Rates

Uninsured Motorists Property Damage		
Property Damage Limits	Private Passenger Types Per Exposure	Other Than Private Passenger Types Per Exposure
5,000	11	20
10,000	13	24
25,000	14	27
50,000	15	29
100,000	16	30

Table 97.B.1.f. Split Limits Uninsured Motorists Property Damage Coverage Base Rates

Base Rate
12

Table 97.B.2.a.(4) Individual Named Insured Base Rate

103. POLLUTION LIABILITY.

3.c. Minimum Premium (Class Code 7971)

The minimum premium at \$25,000 limit is:

- (1) \$50 if the policy does not include Liability insurance for any non-owned autos:
- (2) \$75 if Liability insurance is provided for any non-owned autos.

(Note: Non-owned autos include but are not limited to Hired Autos and Employers non-ownership liability.)

40. PUBLIC AUTO CLASSIFICATIONS

The Liability Factors for Public Auto Not Otherwise Classified in **Table 40.D.3.a. Other Buses** are replaced by the following:

D. Primary Classifications

3. Non-Fleet and Fleet Primary Classifications – Rating Factors And Statistical Codes for Local, Intermediate and Long Distance Radius a. Other Buses

Categories	Local (Up To 50 Miles)			Intermediate (51 To 200 Miles)			Long Distance (Over 200 Miles)		
	Code		Factor	Code		Factor	Code		Factor
Other Buses	Non-Fleet	Fleet	Liab.	Non-Fleet	Fleet	Liab.	Non-Fleet	Fleet	Liab.
Public Auto Not Otherwise Classified	585-	588-	0.75	586-	589-	0.85	5879	5809	1.00

Table 40.D.3.a. Other Buses

State:	District of Columbia	Filing Company:	Sentinel Insurance Company, Ltd.
TOI/Sub-TOI:	20.0 Commercial Auto/20.0000 Commercial Auto Combinations		
Product Name:	CA 2020 - Sentinel Rate Revision		
Project Name/Number:	Commercial Auto /FN.02.503.2020.01		

Supporting Document Schedules

Bypassed - Item:	Consulting Authorization
Bypass Reason:	N/A
Attachment(s):	
Item Status:	
Status Date:	

Satisfied - Item:	Actuarial Certification (P&C)
Comments:	
Attachment(s):	SIC Actuarial Memo.pdf SIC Filing Exhibits.pdf
Item Status:	
Status Date:	

Satisfied - Item:	District of Columbia and Countrywide Experience for the Last 5 Years (P&C)
Comments:	See Actuarial Certification (P&C) above.
Attachment(s):	
Item Status:	
Status Date:	

Satisfied - Item:	District of Columbia and Countrywide Loss Ratio Analysis (P&C)
Comments:	
Attachment(s):	SIC LC Adoption Form.pdf
Item Status:	
Status Date:	

**Sentinel Insurance Company
Commercial Automobile
District of Columbia
Actuarial Memorandum**

Proposal Summary

This filing proposes to revise Commercial Auto base rates to produce an average premium level impact of +6.1% effective 1/18/2020. This filing proposes to:

- Implement new Loss Cost Multipliers.
- Implements new Loss Cost Multipliers to produce revised base rates
- Adopt ISO Liability Deductible Factors from CA-2018-IALL1
- Revise Publics Bus Not Otherwise Classified Classification Factors
- Revise Employed Non-Owned Liability (ENOL) base rates

Exhibit 1 shows proposed premium level changes by coverage and vehicle type.

Ratemaking Methodology

Support for the proposed change is based on indications prepared using a loss ratio method. The experience used is from The Hartford's Commercial Truck and Private Passenger vehicles. These vehicle types represent the bulk of our business. The Hartford's Garage and Publics experience was not reviewed because of small volume and lack of credibility.

The experience underlying the indication is from the five most recent accident years ending 7/31, evaluated as of 10/31/19, weighted by premium.

The underwriting profit load is calculated to deliver 15.0% return on surplus, taking into consideration the timing and amount of cash flows from all sources.

It reflects the investment income derived from policyholder supplied funds from the collection of premium to payment of claims and expenses. It also reflects the investment income derived from shareholder supplied funds (i.e. the surplus supporting underwriting operations.)

Please refer to Exhibit 2 Sheet 1 for the indication by coverage and vehicle type.

Adjustments to historical losses

Historical incurred losses are adjusted to expected prospective levels as shown on Exhibit 2 Sheet 2. The specific adjustments are described below.

Loss Adjustment Expense - Incurred losses are adjusted to include expected ultimate loss adjustment expenses. Please refer to Exhibit 5.

Loss Cost Trend - Incurred losses are trended to a common prospective loss cost level based on observed changes to ISO countrywide frequencies and severities with a 20 point fit from 12Q4 to 17Q3 for Liability, and a 8 point fit from 13Q2 to 16Q4 for Physical Damage. Please refer to Exhibit 6

Expected Loss Development - Incurred losses are developed to ultimate value based on The Hartford's countrywide loss development patterns. Please refer to Exhibit 7.

Excess Losses - are smoothed by capping individual claims at \$100,000. The actual excess losses are replaced with long-term expected excess losses. Please refer to Exhibit 8.

Expected Catastrophe Losses – For OTC, actual catastrophe losses are removed from the experience and replaced with a long term expected amount using the factor derived in Exhibit 9. The experience is from all Hartford Insurance Group writing companies.

Adjustments to historical premium

Historical earned premiums are adjusted as shown in Exhibit 2 Sheet 3.

Premiums are brought to the current total limit manual rate levels. They are then adjusted to reflect the current average level of individual risk pricing. Premiums for physical damage coverages are further adjusted to account for expected increase in the average original cost new (OCN). Please refer to Exhibit 6 Sheet 4.

Credibility

The Hartford's District of Columbia experience is assigned credibility based on the total number of exposures underlying the experience. Partial credibility is determined using an $E/(E+K)$ rule as follows:

$$\text{Credibility} = (\# \text{ of exposures}) / (\# \text{ of exposures} + K)$$

where $K = E[\text{Process Variance}] / \text{Var}[\text{Hypothetical Means}]$ by coverage, as shown in the following table:

Coverage	K
Liability/UM	31,000
OTC	25,000
Collision	12,000

The complement of credibility weight is assigned to countrywide projected ultimate loss and LAE ratio.

Prepared by:
Santhi Sulochanannair
Commercial Auto Actuarial

Sentinel Insurance Co.
Commercial Auto
District of Columbia
Proposed Effective Date: 01/18/2020

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Sentinel Insurance Company
Commercial Auto
District of Columbia
Proposed Effective Date: 01/18/2020
Summary of Proposed Premium Level Changes

Exhibit 1

Vehicle Type	Covg	Written Prem on Policies In Force as of 10/31/2019	Impact of Change to ISO Base Loss Costs	Permissible L&LAE/R		Loss Cost Modification Factor		Loss Cost Multiplier		Base Rate Change	Public Bus NOC Change	Lia Ded Factor Change	ENOL Change	Proposed Premium Level Change
				Current	Proposed	Current	Proposed	Current	Proposed					
TTT	LIA	78,158	0.0%	59.6%	60.8%	1.650	1.750	2.76845638	2.87828947	4.0%	0.0%	0.0%	0.0%	4.0%
	OTC	2,805	0.0%	57.4%	57.5%	1.100	1.120	1.91637631	1.94782609	1.6%	0.0%	0.0%	0.0%	1.6%
	COL	5,813	0.0%	57.4%	57.5%	0.930	1.000	1.62020906	1.73913043	7.3%	0.0%	0.0%	0.0%	7.3%
	PIP	1,171	0.0%	59.6%	60.8%	1.060	1.081	1.77852349	1.77852349	0.0%	0.0%	0.0%	0.0%	0.0%
	UM	7,199	0.0%	59.6%	60.8%	1.620	1.700	2.71812081	2.79605263	2.9%	0.0%	0.0%	0.0%	2.9%
PPT	LIA	87,046	0.0%	59.6%	60.8%	1.380	1.460	2.31543624	2.40131579	3.7%	0.0%	0.0%	0.0%	3.7%
	OTC	9,899	0.0%	57.4%	57.5%	1.250	1.300	2.17770035	2.26086957	3.8%	0.0%	0.0%	0.0%	3.8%
	COL	31,702	0.0%	57.4%	57.5%	1.300	1.350	2.26480836	2.34782609	3.7%	0.0%	0.0%	0.0%	3.7%
	PIP	2,028	0.0%	59.6%	60.8%	1.150	1.173	1.92953020	1.92953020	0.0%	0.0%	0.0%	0.0%	0.0%
	UM	14,864	0.0%	59.6%	60.8%	1.620	1.700	2.71812081	2.79605263	2.9%	0.0%	0.0%	0.0%	2.9%
Publics	LIA	0	0.0%	59.6%	60.8%	1.000	1.000	1.67785235	1.64473684	-2.0%	16.6%	0.0%	0.0%	14.2%
	OTC	0	0.0%	57.4%	57.5%	1.000	1.002	1.74216028	1.74216028	0.0%	0.0%	0.0%	0.0%	0.0%
	COL	0	0.0%	57.4%	57.5%	1.000	1.002	1.74216028	1.74216028	0.0%	0.0%	0.0%	0.0%	0.0%
	PIP	0	0.0%	59.6%	60.8%	1.000	1.020	1.67785235	1.67785235	0.0%	0.0%	0.0%	0.0%	0.0%
	UM	0	0.0%	59.6%	60.8%	1.620	1.700	2.71812081	2.79605263	2.9%	0.0%	0.0%	0.0%	2.9%
Misc	Hired Auto	55,368	0.0%							0.0%	0.0%	0.0%	0.0%	0.0%
	ENOL	22,692	0.0%							0.0%	0.0%	0.0%	46.0%	46.0%
Total		318,745	0.0%							2.8%	0.0%	0.0%	3.3%	6.1%

Misc vehicle types and coverages:

59.6% 60.8% 1.000 1.020 1.678 1.678

Hired Auto Liability Coverage:

59.6% 60.8% 1.650 1.750 2.768 2.878

Veh Type/ Coverage	Fiscal Acci Yr Ending 7/31	W Prem on Pols in Force as of 10/31/2019	Trended Earned Premium at Present Rate & Price Level	Projected Ultimate Inc'd Loss & LAE	Projected Ultimate Loss & LAE Ratio	(2) Prem Wtd 5-Year L/R	Prem Wtd 5-Year Indication	K	Cred	Countrywide L&LAE/R	Cred Wtd L&LAE Ratio	PL&LAE Ratio	Indicated Premium Change
TTT Liab	2019	78,158	94,550	54,569	57.7%								
	2018		141,187	50,280	35.6%								
	2017		265,557	160,947	60.6%	55.2%	-9.2%	31,000	1.4%	72.8%	72.58%	60.8%	19.4%
	2016		335,927	137,673	41.0%								
	2015		369,991	263,275	71.2%								
TTT OTC	2019	2,805	3,293	0	0.0%								
	2018		5,027	0	0.0%								
	2017		10,009	835	8.3%	1.9%	-96.8%	25,000	1.4%	60.8%	59.93%	57.5%	4.2%
	2016		12,730	0	0.0%								
	2015		13,777	0	0.0%								
TTT COL	2019	5,813	6,837	0	0.0%								
	2018		11,019	14,258	129.4%								
	2017		22,467	30,516	135.8%	123.6%	114.9%	12,000	3.0%	68.3%	69.89%	57.5%	21.5%
	2016		28,230	24,975	88.5%								
	2015		30,334	52,443	172.9%								
TTT UM	2019	7,199	7,193	2,742	38.1%								
	2018		10,195	4,134	40.5%								
	2017		20,264	8,738	43.1%	45.0%	-26.0%	31,000	1.3%	80.6%	80.16%	60.8%	31.8%
	2016		25,768	11,817	45.9%								
	2015		28,540	13,919	48.8%								
TTT Total		95,146	1,902,286	1,045,044	54.9%								19.9%
PPT Liab	2019	87,046	91,924	57,211	62.2%								
	2018		136,094	72,785	53.5%								
	2017		221,027	112,291	50.8%	110.5%	81.8%	31,000	2.2%	73.3%	74.15%	60.8%	22.0%
	2016		308,818	190,779	61.8%								
	2015		366,863	810,227	220.9%								
PPT OTC	2019	9,899	11,181	0	0.0%								
	2018		16,103	4,796	29.8%								
	2017		26,332	9,253	35.1%	56.1%	-2.5%	25,000	2.7%	81.2%	80.55%	57.5%	40.1%
	2016		36,588	28,642	78.3%								
	2015		44,014	32,576	74.0%								
PPT Coll	2019	31,702	33,648	23,889	71.0%								
	2018		47,331	41,471	87.6%								
	2017		78,860	51,355	65.1%	82.0%	42.6%	12,000	5.4%	66.8%	67.61%	57.5%	17.6%
	2016		115,290	105,169	91.2%								
	2015		141,146	119,534	84.7%								
PPT UM	2019	14,864	16,058	6,122	38.1%								
	2018		22,622	9,172	40.5%								
	2017		35,990	15,519	43.1%	44.9%	-26.1%	31,000	2.2%	79.2%	78.42%	60.8%	29.0%
	2016		49,334	22,625	45.9%								
	2015		58,604	28,582	48.8%								
PPT Total		145,539	2,617,566	2,636,421	100.7%								23.3%
Total		240,685	4,519,852	3,681,465	81.5%								21.9%

Sentinel Insurance Company
Commercial Auto
District of Columbia
Proposed Effective Date: 01/18/2020
Development of Adjusted Losses

Exhibit 2
Sheet 2

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Veh Type	Covg	Fiscal Acci Yr Ending 7/31	Historic Ann. Loss Cost Trend	Prospective Ann. Loss Cost Trend	Incurred Losses with Indiv claims Capped at 100K Eval @ 10/31	Loss Dev Factor	Earned Premium at Manual Present Rates	Excess Loss Premium Factor	Projected Ultimate Total Limit Incurred Losses	Loss Trend	LAE	Other Loss Adj	Projected Ult T/L Inc'd L&LAE at Curr Cost Levels
TTT	Liab	2019	6.3%	6.3%	16,025	1.479	\$98,149	0.177	41,071	1.125	1.181	1.000	54,569
		2018			8,653	1.114	\$146,560	0.177	35,584	1.197	1.181	1.000	50,280
		2017			56,681	1.029	\$275,664	0.177	107,102	1.273	1.181	1.000	160,947
		2016			24,258	1.007	\$348,712	0.177	86,144	1.353	1.181	1.000	137,673
		2015			86,876	1.001	\$384,072	0.177	154,900	1.439	1.181	1.000	263,275
	OTC	2019	4.3%	4.3%	0	1.010	3,357	0.000	0	1.083	1.107	1.060	0
		2018			0	1.000	5,075	0.000	0	1.129	1.107	1.060	0
		2017			604	1.000	10,008	0.000	604	1.178	1.107	1.060	835
		2016			0	1.000	12,609	0.000	0	1.228	1.107	1.060	0
		2015			0	1.000	13,516	0.000	0	1.280	1.107	1.060	0
	Coll	2019	6.7%	6.7%	0	0.956	6,913	0.000	0	1.133	1.107	1.000	0
		2018			10,738	0.992	10,990	0.000	10,652	1.209	1.107	1.000	14,258
		2017			21,437	0.997	22,101	0.000	21,364	1.290	1.107	1.000	30,516
		2016			16,414	0.998	27,391	0.000	16,384	1.377	1.107	1.000	24,975
		2015			32,272	0.999	29,031	0.000	32,238	1.469	1.107	1.000	52,443
	UM	2019	6.3%	6.3%	0	2.899	7,193	0.287	2,064	1.125	1.181	1.000	2,742
		2018			0	1.562	10,195	0.287	2,925	1.197	1.181	1.000	4,134
		2017			0	1.185	20,264	0.287	5,815	1.273	1.181	1.000	8,738
		2016			0	1.073	25,768	0.287	7,394	1.353	1.181	1.000	11,817
		2015			0	1.031	28,540	0.287	8,190	1.439	1.181	1.000	13,919
PPT	Liab	2019	6.3%	6.3%	18,212	1.479	95,422	0.169	43,059	1.125	1.181	1.000	57,211
		2018			24,799	1.114	141,274	0.169	51,510	1.197	1.181	1.000	72,785
		2017			34,945	1.029	229,439	0.169	74,724	1.273	1.181	1.000	112,291
		2016			64,759	1.007	320,571	0.169	119,374	1.353	1.181	1.000	190,779
		2015			412,138	1.001	380,825	0.169	476,705	1.439	1.181	1.000	810,227
	OTC	2019	7.4%	7.4%	0	1.010	11,393	0.000	0	1.147	1.107	1.060	0
		2018			3,317	1.000	16,249	0.000	3,319	1.231	1.107	1.060	4,796
		2017			5,961	1.000	26,314	0.000	5,961	1.322	1.107	1.060	9,253
		2016			17,183	1.000	36,210	0.000	17,183	1.420	1.107	1.060	28,642
		2015			18,197	1.000	43,138	0.000	18,197	1.525	1.107	1.060	32,576
	Coll	2019	5.9%	5.9%	20,236	0.956	34,535	0.000	19,339	1.116	1.107	1.000	23,889
		2018			31,964	0.992	48,292	0.000	31,709	1.181	1.107	1.000	41,471
		2017			37,213	0.997	79,988	0.000	37,087	1.251	1.107	1.000	51,355
		2016			71,865	0.998	116,249	0.000	71,735	1.324	1.107	1.000	105,169
		2015			77,089	0.999	141,482	0.000	77,008	1.402	1.107	1.000	119,534
	UM	2019	6.3%	6.3%	0	2.899	16,058	0.287	4,608	1.125	1.181	1.000	6,122
		2018			0	1.562	22,622	0.287	6,491	1.197	1.181	1.000	9,172
		2017			0	1.185	35,990	0.287	10,327	1.273	1.181	1.000	15,519
		2016			0	1.073	49,334	0.287	14,157	1.353	1.181	1.000	22,625
		2015			0	1.031	58,604	0.287	16,817	1.439	1.181	1.000	28,582

(1) Column 10 = $[(6)*(7)+(8)*(9)]$

(2) Column 11 = $[1+(4)]^{(t1)}$

(3) Column 13 - Other loss adjustment is for expected OTC catastrophes

(4) Column 14 = $[(10)*(11)*(12)*(13)]$

(t1) = The time from average accident date to one year from the effective date

Sentinel Insurance Company
Commercial Auto
District of Columbia
Proposed Effective Date: 01/18/2020
Development Of Adjusted Premiums

Exhibit 2
Sheet 3

Veh Type	Coverage	Projected Annual Premium Trend	Year	Earned Premium	Earned Premium at Present Manual Rate Level	Trend Adj	Pricing Adj	Trended Earned Premium at Present Rate & Price level
TTT	Liability	0.0%	2019	80,800	98,149	1.000	0.963	94,550
			2018	117,690	146,560	1.000	0.963	141,187
			2017	208,712	275,664	1.000	0.963	265,557
			2016	237,694	348,712	1.000	0.963	335,927
			2015	241,892	384,072	1.000	0.963	369,991
	OTC	1.0%	2019	2,984	3,357	1.018	0.963	3,293
			2018	4,373	5,075	1.028	0.963	5,027
			2017	8,390	10,008	1.038	0.963	10,009
			2016	10,093	12,609	1.048	0.963	12,730
			2015	10,208	13,516	1.058	0.963	13,777
	Collision	1.4%	2019	6,175	6,913	1.027	0.963	6,837
			2018	9,644	10,990	1.041	0.963	11,019
			2017	18,980	22,101	1.055	0.963	22,467
			2016	22,483	27,391	1.070	0.963	28,230
			2015	22,485	29,031	1.085	0.963	30,334
	UM	0.0%	2019	7,062	7,193	1.000	1.000	7,193
			2018	9,757	10,195	1.000	1.000	10,195
			2017	18,896	20,264	1.000	1.000	20,264
			2016	23,734	25,768	1.000	1.000	25,768
			2015	25,973	28,540	1.000	1.000	28,540
PPT	Liability	0.0%	2019	99,154	95,422	1.000	0.963	91,924
			2018	139,645	141,274	1.000	0.963	136,094
			2017	213,997	229,439	1.000	0.963	221,027
			2016	270,499	320,571	1.000	0.963	308,818
			2015	290,086	380,825	1.000	0.963	366,863
	OTC	1.0%	2019	10,069	11,393	1.019	0.963	11,181
			2018	13,553	16,249	1.029	0.963	16,103
			2017	21,006	26,314	1.039	0.963	26,332
			2016	26,778	36,210	1.049	0.963	36,588
			2015	28,311	43,138	1.059	0.963	44,014
	Collision	0.6%	2019	33,338	34,535	1.011	0.963	33,648
			2018	42,589	48,292	1.017	0.963	47,331
			2017	60,606	79,988	1.023	0.963	78,860
			2016	74,115	116,249	1.029	0.963	115,290
			2015	79,858	141,482	1.036	0.963	141,146
	UM	0.0%	2019	15,715	16,058	1.000	1.000	16,058
			2018	21,598	22,622	1.000	1.000	22,622
			2017	33,512	35,990	1.000	1.000	35,990
			2016	45,389	49,334	1.000	1.000	49,334
			2015	53,265	58,604	1.000	1.000	58,604

Sentinel Insurance Company
Commercial Auto
District of Columbia
Proposed Effective Date: 01/18/2020
Permissible Loss & Loss Adjustment Expense Ratio

Exhibit 3
Sheet 1

	<u>Liability/UM</u>	<u>OTC</u>	<u>Collision</u>
<u>Expense</u>			
Commissions	16.3%	16.3%	16.3%
Other Underwriting Expenses	18.7%	18.7%	18.7%
Taxes, Licenses and Fee	1.7%	1.7%	1.7%
Profit & Contingencies (including Investment Income)	<u>2.5%</u>	<u>5.8%</u>	<u>5.8%</u>
Total Expense & Profit	39.2%	42.5%	42.5%
Permissible Loss & LAE Ratio	60.8%	57.5%	57.5%

Sentinel Insurance Company
Commercial Auto
District of Columbia
Proposed Effective Date: 01/18/2020
Underwriting Expense Assumptions
Countrywide

Exhibit 3
Sheet 2

Direct Written Premium (\$000)
Commissions (\$000)
Other UW Expense (\$000)
Taxes Licenses and Fees

Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2018
498,923	521,400	527,539	465,903	475,566
82,830	89,833	87,031	75,739	77,017
92,021	89,228	90,366	92,561	90,382
12,623	13,089	13,495	10,888	11,841

Commission as % of Direct WP
OUE as % of Direct WP

					3-Year Average (2016-2018)	<i>Selected</i>
16.6%	17.2%	16.5%	16.3%	16.2%	16.3%	16.3%
18.4%	17.1%	17.1%	19.9%	19.0%	18.7%	18.7%

Source: Internal Hartford Expense Management Reports

Sentinel Insurance Company

Exhibit 4

Commercial Auto

Sheet 1

District of Columbia

Proposed Effective Date: 01/18/2020

Calculation of Total Rate of Return: Liability

Accident Effective Period: January 1, 2019 through December 31, 2019

<u>Financials</u>	<u>Before-Tax</u>	<u>Premium %</u>
Earned Premium	\$100,000	
Expected Loss & LAE	\$60,834	60.8%
Expected Expenses	\$36,700	36.7%
Total Loss, LAE & Expenses	\$97,534	97.5%
Expected Underwriting Profit	\$2,466	2.5%

AssumptionsTiming of Accounting Entry

Average Earning Lag (Years)	0.50
Average Loss & LAE Incurral Lag (Years)	0.50
Average Expense Incurral Lag (Years)	0.50

Timing of Cash Flows

Average Premium Payment Lag (Years)	0.91
Average Loss & LAE Payment Lag (Years)	2.69
Average Expense Payment Lag (Years)	0.81

Investment and Tax

Investment Rate Before-tax	2.78%
Tax Loss Discount Rate	3.57%
Net Cost of Debt (Debt Cost less Investment Income)	2.45%
Federal Income Tax Rate - Underwriting	21.0%
Federal Income Tax Rate - Investment	21.0%

Leverage and Surplus

Premium To Surplus Ratio	3.30
Liability To Surplus Ratio	3.11

<u>Results</u>	<u>Before-Tax</u>	<u>After-Tax</u>
Underwriting Income (Profit)	\$2,466	\$1,948
Investment Income Credit (Operating)	\$2,619	\$2,069
Total Operating Income	\$5,086	\$4,018
Operating Return On Premium	5.1%	4.0%
Surplus		
Surplus Attributed	\$30,340	\$30,340
Investment Income On Surplus	\$845	\$668
Servicing Cost of Debt		-\$134
Total Net Income	\$5,931	\$4,551
Expected Return on Surplus		15.0%

<u>Financials</u>	<u>Before-Tax</u>	<u>Premium %</u>
Earned Premium	\$100,000	
Expected Loss & LAE	\$57,516	57.5%
Expected Expenses	\$36,700	36.7%
Total Loss, LAE & Expenses	\$94,216	94.2%
Expected Underwriting Profit	\$5,784	5.8%

AssumptionsTiming of Accounting Entry

Average Earning Lag (Years)	0.50
Average Loss & LAE Incurral Lag (Years)	0.50
Average Expense Incurral Lag (Years)	0.50

Timing of Cash Flows

Average Premium Payment Lag (Years)	0.91
Average Loss & LAE Payment Lag (Years)	0.70
Average Expense Payment Lag (Years)	0.81

Investment and Tax

Investment Rate Before-tax	2.73%
Tax Loss Discount Rate	3.57%
Net Cost of Debt (Debt Cost less Investment Income)	2.45%
Federal Income Tax Rate - Underwriting	21.0%
Federal Income Tax Rate - Investment	21.0%

Leverage and Surplus

Premium To Surplus Ratio	3.21
Liability To Surplus Ratio	(0.56)

<u>Results</u>	<u>Before-Tax</u>	<u>After-Tax</u>
Underwriting Income (Profit)	\$5,784	\$4,569
Investment Income Credit (Operating)	-\$548	-\$433
Total Operating Income	\$5,236	\$4,136
Operating Return On Premium	5.2%	4.1%
Surplus		
Surplus Attributed	\$31,118	\$31,118
Investment Income On Surplus	\$847	\$669
Servicing Cost of Debt		-\$138
Total Net Income	\$6,083	\$4,668
Expected Return on Surplus		15.0%

Sentinel Insurance Company
Commercial Auto
District of Columbia
Proposed Effective Date: 01/18/2020
Loss Adjustment Expense Assumptions

Exhibit 5

Liability

<u>Year</u>	<u>Inc Loss</u>	<u>Inc ALAE</u>	<u>Inc ULAE</u>	<u>LAE</u>	<u>ALAE as a % of Inc Loss</u>	<u>ULAE as a % of Inc Loss</u>	<u>LAE as a % of Inc Loss</u>
2014	287,002	37,341	28,255	65,596	13.0%	9.8%	22.9%
2015	311,897	29,393	26,849	56,242	9.4%	8.6%	18.0%
2016	377,630	33,903	24,241	58,144	9.0%	6.4%	15.4%
2017	359,439	29,129	28,006	57,135	8.1%	7.8%	15.9%
2018	298,990	31,287	27,158	58,445	10.5%	9.1%	19.5%
Total	1,634,958	161,053	134,509	295,562	9.9%	8.2%	18.1%
						Selected:	18.1%

Physical Damage

<u>Year</u>	<u>Inc Loss</u>	<u>Inc ALAE</u>	<u>Inc ULAE</u>	<u>LAE</u>	<u>ALAE as a % of Inc Loss</u>	<u>ULAE as a % of Inc Loss</u>	<u>LAE as a % of Inc Loss</u>
2014	79,192	549	8,280	8,829	0.7%	10.5%	11.1%
2015	73,283	189	7,971	8,160	0.3%	10.9%	11.1%
2016	84,678	138	8,430	8,568	0.2%	10.0%	10.1%
2017	89,339	1,595	8,198	9,793	1.8%	9.2%	11.0%
2018	69,645	1,651	5,488	7,139	2.4%	7.9%	10.3%
Total	396,137	4,122	38,367	42,489	1.0%	9.7%	10.7%
						Selected:	10.7%

Source: Insurance expense exhibit

ISO - Commercial Auto BI Trend
Multistate
Accident Year Incurred

Bodily Injury						
Time	Accident Year Ending	Ultimate Frequency per 100 Exposures	Yearly Change in Frequency	Total Limits Severity	Yearly Change in Severity	Yearly Change in Loss Costs
1	06/30/12	0.8053		49,540		
2	09/30/12	0.7964		49,674		
3	12/31/12	0.7911		50,990		
4	03/31/13	0.7848		52,380		
5	06/30/13	0.7912	-1.8%	53,690	8.4%	6.5%
6	09/30/13	0.8012	0.6%	54,565	9.8%	10.5%
7	12/31/13	0.8016	1.3%	54,020	5.9%	7.4%
8	03/31/14	0.8103	3.2%	53,474	2.1%	5.4%
9	06/30/14	0.8023	1.4%	53,621	-0.1%	1.3%
10	09/30/14	0.7960	-0.6%	54,916	0.6%	0.0%
11	12/31/14	0.8009	-0.1%	55,450	2.6%	2.6%
12	03/31/15	0.7928	-2.2%	55,776	4.3%	2.1%
13	06/30/15	0.7974	-0.6%	56,715	5.8%	5.1%
14	09/30/15	0.8037	1.0%	58,270	6.1%	7.1%
15	12/31/15	0.8119	1.4%	59,030	6.5%	7.9%
16	03/31/16	0.8232	3.8%	59,650	6.9%	11.0%
17	06/30/16	0.8334	4.5%	60,692	7.0%	11.8%
18	09/30/16	0.8443	5.1%	61,460	5.5%	10.8%
19	12/31/16	0.8431	3.8%	62,875	6.5%	10.6%
20	03/31/17	0.8452	2.7%	64,042	7.4%	10.2%
21	06/30/17	0.8488	1.8%	64,397	6.1%	8.1%
22	09/30/17	0.8384	-0.7%	63,275	3.0%	2.2%
23	12/31/17	0.8377	-0.6%	63,157	0.4%	-0.2%
24	03/31/18	0.8395	-0.7%	64,504	0.7%	0.0%

Property Damage				
Ultimate Frequency per 100 Exposures	Yearly Change in Frequency	Total Limits Severity	Yearly Change in Severity	Yearly Change in Loss Costs
2.8895		3.755		
2.8688		3.770		
2.8493		3.838		
2.8702		3.838		
2.8932	-0.2%	3.870	3.1%	2.9%
2.9248	2.0%	3.904	3.6%	5.6%
2.9440	3.3%	3.913	1.9%	5.3%
3.0257	5.4%	3.936	2.6%	8.1%
3.0251	4.6%	3.983	2.9%	7.6%
3.0249	3.4%	4.048	3.7%	7.2%
3.0198	2.6%	4.109	5.0%	7.7%
2.9837	-1.4%	4.181	6.2%	4.7%
2.9885	-1.2%	4.246	6.6%	5.3%
3.0166	-0.3%	4.297	6.1%	5.8%
3.0350	0.5%	4.346	5.8%	6.3%
3.0137	1.0%	4.394	5.1%	6.1%
3.0258	1.2%	4.468	5.2%	6.5%
3.0357	0.6%	4.516	5.1%	5.8%
3.0306	-0.1%	4.566	4.8%	4.7%
3.0097	-0.1%	4.623	5.2%	5.1%
2.9967	-1.0%	4.665	4.4%	3.4%
2.9489	-2.9%	4.685	3.8%	0.8%
2.9314	-3.3%	4.727	3.8%	0.4%
2.9243	-2.8%	4.771	3.2%	0.3%

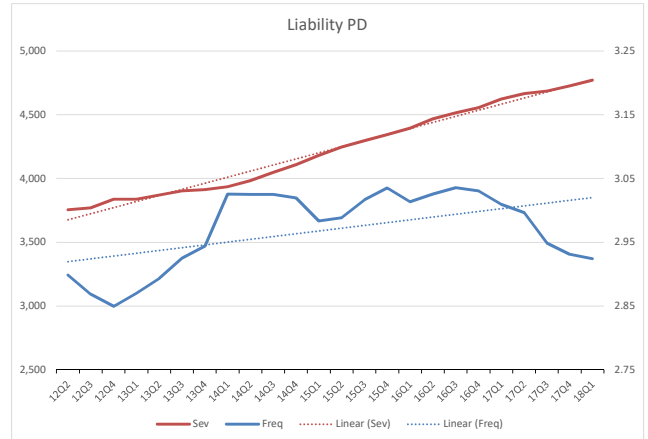
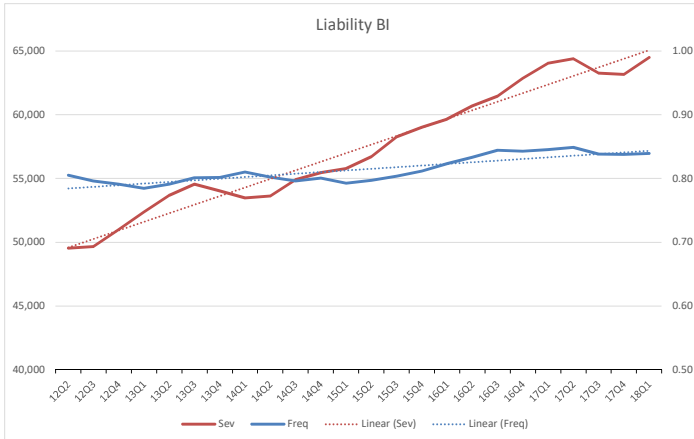
Fit		Frequency	Severity	Total
24 Points	12Q2 to 18Q1	1.3%	4.8%	6.1%
20 Points	12Q4 to 17Q3	1.6%	4.9%	6.6%
	13Q1 to 17Q4	1.6%	4.7%	6.4%
	13Q2 to 18Q1	1.5%	4.7%	6.3%
16 Points	13Q4 to 17Q3	1.8%	5.6%	7.5%
	14Q1 to 17Q4	1.8%	5.5%	7.4%
	14Q2 to 18Q1	1.9%	5.3%	7.3%
12 Points	14Q4 to 17Q3	2.7%	5.9%	8.8%
	15Q1 to 17Q4	2.4%	5.2%	7.8%
	15Q2 to 18Q1	1.9%	4.6%	6.6%
8 Points	15Q4 to 17Q3	2.0%	5.1%	7.3%
	16Q1 to 17Q4	0.8%	3.7%	4.6%
	16Q2 to 18Q1	0.0%	2.8%	2.8%
4 Points	16Q4 to 17Q3	-0.5%	1.0%	0.5%
	17Q1 to 17Q4	-1.6%	-2.3%	-3.9%
	17Q2 to 18Q1	-1.3%	0.1%	-1.2%

Selected: 20 Points 12Q4 to 17Q3 1.6% 4.9% 6.6%

	Frequency	Severity	Total
24 Points	0.6%	4.6%	5.2%
20 Points	0.8%	4.8%	5.7%
	0.4%	4.9%	5.4%
	0.1%	4.9%	5.0%
16 Points	0.0%	5.3%	5.3%
	-0.4%	5.1%	4.7%
	-0.6%	4.9%	4.3%
12 Points	-0.2%	4.9%	4.7%
	-0.5%	4.6%	4.1%
	-1.0%	4.4%	3.3%
8 Points	-1.2%	4.6%	3.3%
	-1.7%	4.2%	2.4%
	-2.4%	3.8%	1.3%
4 Points	-3.4%	3.8%	0.3%
	-3.7%	2.9%	-1.0%
	-3.1%	3.1%	-0.1%

20 Points 0.8% 4.8% 5.7%

Weighted (75/25)	6.3%
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ISO - Commercial Auto Other Than Collision Trend

Multistate

Calendar Year Paid

TRUCKS, TRACTORS, AND TRAILERS

Time	Year Ending	Ultimate Frequency per 100 Exposures	Yearly Change in Frequency	\$500 Deductible Severity	Yearly Change in Severity	Yearly Change in Loss Costs
1	06/30/2013	1.4422		4,851		
2	12/31/2013	1.4153		4,839		
3	06/30/2014	1.4119	-2.1%	5,035	3.8%	1.6%
4	12/31/2014	1.3715	-3.1%	5,248	8.4%	5.1%
5	06/30/2015	1.3544	-4.1%	5,392	7.1%	2.7%
6	12/31/2015	1.3517	-1.4%	5,666	8.0%	6.4%
7	06/30/2016	1.3469	-0.6%	5,808	7.7%	7.1%
8	12/31/2016	1.3499	-0.1%	5,853	3.3%	3.2%
9	06/30/2017	1.3541	0.5%	6,215	7.0%	7.6%
10	12/31/2017	1.3765	2.0%	6,552	11.9%	14.2%

		Frequency		Severity		Total
10 Points	13Q2 to 17Q4	-1.2%		7.0%		5.7%
8 Points	13Q2 to 16Q4	-2.0%		6.4%		4.3%
	13Q4 to 17Q2	-1.4%		7.0%		5.5%
	14Q2 to 17Q4	-0.6%		7.3%		6.7%
4 Points	15Q2 to 16Q4	-0.3%		5.6%		5.3%
	15Q4 to 17Q2	0.1%		5.9%		6.0%
	16Q2 to 17Q4	1.4%		8.8%		10.3%

Selected: 8 Points 13Q2 to 16Q4 -2.0% 6.4% 4.3%

PRIVATE PASSENGER TYPES

Time	Year Ending	Ultimate Frequency per 100 Exposures	Yearly Change in Frequency	\$500 Deductible Severity	Yearly Change in Severity	Yearly Change in Loss Costs
1	06/30/2013	3.1035		1,902		
2	12/31/2013	3.1035		1,914		
3	06/30/2014	3.2260	3.9%	1,965	3.3%	7.4%
4	12/31/2014	3.1967	3.0%	2,056	7.4%	10.7%
5	06/30/2015	3.0840	-4.4%	2,123	8.0%	3.3%
6	12/31/2015	3.1549	-1.3%	2,244	9.1%	7.7%
7	06/30/2016	3.2030	3.9%	2,347	10.5%	14.8%
8	12/31/2016	3.1035	-1.6%	2,354	4.9%	3.2%
9	06/30/2017	3.0051	-6.2%	2,400	2.2%	-4.1%
10	12/31/2017	2.9925	-3.6%	2,575	9.4%	5.5%

		Frequency		Severity		Total
10 Points	13Q2 to 17Q4	-0.9%		7.1%		6.2%
8 Points	13Q2 to 16Q4	0.1%		7.3%		7.4%
	13Q4 to 17Q2	-0.9%		7.2%		6.3%
	14Q2 to 17Q4	-1.9%		7.5%		5.4%
4 Points	15Q2 to 16Q4	0.7%		7.3%		8.1%
	15Q4 to 17Q2	-3.5%		4.2%		0.5%
	16Q2 to 17Q4	-4.6%		6.1%		1.2%

Selected: 8 Points 13Q2 to 16Q4 0.1% 7.3% 7.4%

ISO - Commercial Auto Collision Trend

Multistate

Calendar Year Paid

TRUCKS, TRACTORS, AND TRAILERS

Time	Year Ending	Ultimate Frequency per 100 Exposures	Yearly Change in Frequency	\$500 Deductible Severity	Yearly Change in Severity	Yearly Change in Loss Costs
1	06/30/2013	2.2440		7,665		
2	12/31/2013	2.2362		7,856		
3	06/30/2014	2.2971	2.4%	8,040	4.9%	7.4%
4	12/31/2014	2.2800	2.0%	8,346	6.2%	8.3%
5	06/30/2015	2.2504	-2.0%	8,628	7.3%	5.1%
6	12/31/2015	2.2734	-0.3%	8,757	4.9%	4.6%
7	06/30/2016	2.2563	0.3%	9,124	5.7%	6.0%
8	12/31/2016	2.3489	3.3%	9,326	6.5%	10.0%
9	06/30/2017	2.3681	5.0%	9,380	2.8%	7.9%
10	12/31/2017	2.2975	-2.2%	9,888	6.0%	3.7%

		Frequency		Severity		Total
10 Points	13Q2 to 17Q4	0.9%		5.7%		6.6%
8 Points	13Q2 to 16Q4	0.8%		5.9%		6.7%
	13Q4 to 17Q2	1.2%		5.5%		6.8%
	14Q2 to 17Q4	0.7%		5.6%		6.4%
4 Points	15Q2 to 16Q4	2.4%		5.6%		8.2%
	15Q4 to 17Q2	3.3%		4.7%		8.1%
	16Q2 to 17Q4	1.3%		5.1%		6.4%

Selected: 8 Points 13Q2 to 16Q4 0.8% 5.9% 6.7%

PRIVATE PASSENGER TYPES

Time	Year Ending	Ultimate Frequency per 100 Exposures	Yearly Change in Frequency	\$500 Deductible Severity	Yearly Change in Severity	Yearly Change in Loss Costs
1	06/30/2013	5.0940		4,986		
2	12/31/2013	5.0944		5,038		
3	06/30/2014	5.2539	3.1%	5,157	3.4%	6.7%
4	12/31/2014	5.2844	3.7%	5,376	6.7%	10.7%
5	06/30/2015	5.2453	-0.2%	5,510	6.8%	6.7%
6	12/31/2015	5.2610	-0.4%	5,619	4.5%	4.1%
7	06/30/2016	5.1502	-1.8%	5,767	4.7%	2.8%
8	12/31/2016	5.2059	-1.0%	5,949	5.9%	4.8%
9	06/30/2017	5.2088	1.1%	5,978	3.7%	4.8%
10	12/31/2017	5.1562	-1.0%	6,230	4.7%	3.7%

		Frequency		Severity		Total
10 Points	13Q2 to 17Q4	0.2%		5.2%		5.3%
8 Points	13Q2 to 16Q4	0.5%		5.4%		5.9%
	13Q4 to 17Q2	0.1%		5.2%		5.3%
	14Q2 to 17Q4	-0.6%		5.2%		4.5%
4 Points	15Q2 to 16Q4	-0.9%		5.3%		4.3%
	15Q4 to 17Q2	-0.4%		4.4%		4.0%
	16Q2 to 17Q4	0.1%		4.8%		4.9%

Selected: 8 Points 13Q2 to 16Q4 0.5% 5.4% 5.9%

TRUCKS, TRACTORS, AND TRAILERS

Year Ended	OTHER THAN COLLISION	COLLISION
06/30/2013	1.224	1.359
12/31/2013	1.230	1.368
06/30/2014	1.237	1.377
12/31/2014	1.242	1.385
06/30/2015	1.248	1.394
12/31/2015	1.254	1.402
06/30/2016	1.260	1.413
12/31/2016	1.266	1.424
06/30/2017	1.272	1.435
12/31/2017	1.278	1.447
Average Annual Change 10 PT:	1.0%	1.4%
Coefficient of Determination R2:	1.000	0.997
Selected:	1.0%	1.4%

PRIVATE PASSENGER TYPES

Year Ended	OTHER THAN COLLISION	COLLISION
06/30/2013	1.304	1.150
12/31/2013	1.309	1.153
06/30/2014	1.314	1.155
12/31/2014	1.320	1.158
06/30/2015	1.325	1.161
12/31/2015	1.332	1.165
06/30/2016	1.340	1.170
12/31/2016	1.347	1.173
06/30/2017	1.355	1.177
12/31/2017	1.361	1.180
Average Annual Change 10 PT:	1.0%	0.6%
Coefficient of Determination R2:	0.994	0.992
Selected:	1.0%	0.6%

Source:
Insurance Services Office Comm Auto Trend Data and Analysis
Multistate (All states except Hawaii and Massachusetts)

Sentinel Insurance Company

Commercial Auto

District of Columbia

Proposed Effective Date: 01/18/2020

Loss Development: Countrywide Liability (in thousands)

Capped at \$100,000

EXHIBIT 7

Sheet 1

ACC	@ 15	@ 27	@ 39	@ 51	@ 63	@ 75	@ 87	@ 99	@ 111	@ 123	@ 135	@ 147
<u>Year</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>
2007	126,058	156,737	172,515	176,882	177,960	177,369	177,422	177,373	177,373	177,375	177,306	177,328
2008	114,069	143,534	154,460	156,783	156,906	157,084	157,336	157,029	157,075	157,076	157,038	
2009	103,481	132,096	142,247	145,968	147,729	147,118	147,291	147,254	147,468	147,439		
2010	104,365	129,905	145,228	150,390	148,638	148,528	148,688	148,501	148,513			
2011	107,531	144,326	161,343	159,567	159,969	160,291	160,306	160,342				
2012	112,561	153,198	161,622	164,605	165,724	166,349	166,443					
2013	104,022	129,967	139,922	144,375	145,743	145,627						
2014	94,001	123,621	135,440	138,172	139,854							
2015	93,739	125,952	135,862	139,505								
2016	93,198	123,260	134,897									
2017	78,968	106,816										
2018	69,978											

ACC	15-27	27-39	39-51	51-63	63-75	75-87	87-99	99-111	111-123	123-135	135-147
<u>Year</u>											
2007	1.243	1.101	1.025	1.006	0.997	1.000	1.000	1.000	1.000	1.000	1.000
2008	1.258	1.076	1.015	1.001	1.001	1.002	0.998	1.000	1.000	1.000	
2009	1.277	1.077	1.026	1.012	0.996	1.001	1.000	1.001	1.000		
2010	1.245	1.118	1.036	0.988	0.999	1.001	0.999	1.000			
2011	1.342	1.118	0.989	1.003	1.002	1.000	1.000				
2012	1.361	1.055	1.018	1.007	1.004	1.001					
2013	1.249	1.077	1.032	1.009	0.999						
2014	1.315	1.096	1.020	1.012							
2015	1.344	1.079	1.027								
2016	1.323	1.094									
2017	1.353										

All pt	1.301	1.089	1.021	1.005	1.000	1.001	0.999	1.000	1.000	1.000	1.000
5 Yr Avg	1.317	1.080	1.017	1.004	1.000	1.001	0.999				
5 Yr Ex-Hi Lo	1.327	1.083	1.022	1.006	1.000	1.001	0.999				
Selected	1.327	1.083	1.022	1.006	1.000	1.001	0.999	1.000			
Age to Ult	1.479	1.114	1.029	1.007	1.001	1.000	0.999	1.000			

Sentinel Insurance Company

Commercial Auto

District of Columbia

Proposed Effective Date: 01/18/2020

Loss Development: Countrywide OTC (in thousands)

EXHIBIT 7

Sheet 2

ACC	@ 15	@ 27	@ 39	@ 51	@ 63	@ 75	@ 87	@ 99	@ 111	@ 123	@ 135	@ 147
<u>Year</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>
2007	18,882	18,983	18,932	18,917	18,917	18,915	18,915	18,915	18,915	18,920	18,920	18,920
2008	20,253	20,370	20,413	20,413	20,408	20,398	20,384	20,384	20,384	20,387	20,387	
2009	16,576	16,744	16,728	16,698	16,691	16,691	16,691	16,691	16,691	16,691		
2010	15,609	15,745	15,742	15,756	15,756	15,737	15,737	15,737	15,737			
2011	18,028	17,967	18,004	18,004	17,987	17,988	17,984	17,984				
2012	18,346	18,275	18,274	18,274	18,285	18,292	18,292					
2013	15,439	15,569	15,670	15,675	15,675	15,677						
2014	16,276	16,516	16,529	16,510	16,510							
2015	15,755	15,902	15,909	15,913								
2016	15,820	15,986	15,966									
2017	15,445	15,542										
2018	12,055											
ACC												
<u>Year</u>	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-87</u>	<u>87-99</u>	<u>99-111</u>	<u>111-123</u>	<u>123-135</u>	<u>135-147</u>	
2007	1.005	0.997	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2008	1.006	1.002	1.000	1.000	1.000	0.999	1.000	1.000	1.000	1.000		
2009	1.010	0.999	0.998	1.000	1.000	1.000	1.000	1.000	1.000			
2010	1.009	1.000	1.001	1.000	0.999	1.000	1.000	1.000				
2011	0.997	1.002	1.000	0.999	1.000	1.000	1.000					
2012	0.996	1.000	1.000	1.001	1.000	1.000						
2013	1.008	1.006	1.000	1.000	1.000							
2014	1.015	1.001	0.999	1.000								
2015	1.009	1.000	1.000									
2016	1.010	0.999										
2017	1.006											
All pt	1.007	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
5 Yr Avg	1.010	1.001	1.000	1.000	1.000	1.000	1.000					
5 Yr Ex-Hi Lo	1.009	1.000	1.000	1.000	1.000	1.000	1.000					
Selected	1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
Age to Ult	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000				

Sentinel Insurance Company

Commercial Auto

District of Columbia

Proposed Effective Date: 01/18/2020

Loss Development: Countrywide Collision (in thousands)

EXHIBIT 7

Sheet 3

ACC	@ 15	@ 27	@ 39	@ 51	@ 63	@ 75	@ 87	@ 99	@ 111	@ 123	@ 135	@ 147
<u>Year</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>
2007	74,615	69,911	69,559	69,412	69,400	69,398	69,390	69,389	69,386	69,384	69,383	69,382
2008	68,770	65,762	65,325	65,276	65,241	65,226	65,174	65,162	65,153	65,152	65,184	
2009	58,218	55,792	55,678	55,608	55,597	55,589	55,574	55,569	55,566	55,578		
2010	56,928	54,598	54,214	54,050	54,011	53,935	53,923	53,867	53,866			
2011	59,916	57,425	56,886	56,773	56,660	56,656	56,654	56,594				
2012	58,890	56,626	56,299	56,163	56,134	56,119	56,079					
2013	56,076	54,029	53,697	53,667	53,630	53,618						
2014	56,896	54,875	54,762	54,671	54,623							
2015	59,583	57,394	57,247	57,183								
2016	58,483	56,338	56,029									
2017	54,371	52,053										
2018	50,452											
ACC												
<u>Year</u>	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-87</u>	<u>87-99</u>	<u>99-111</u>	<u>111-123</u>	<u>123-135</u>	<u>135-147</u>	
2007	0.937	0.995	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2008	0.956	0.993	0.999	0.999	1.000	0.999	1.000	1.000	1.000	1.000		
2009	0.958	0.998	0.999	1.000	1.000	1.000	1.000	1.000	1.000			
2010	0.959	0.993	0.997	0.999	0.999	1.000	0.999	1.000				
2011	0.958	0.991	0.998	0.998	1.000	1.000	0.999					
2012	0.962	0.994	0.998	0.999	1.000	0.999						
2013	0.963	0.994	0.999	0.999	1.000							
2014	0.964	0.998	0.998	0.999								
2015	0.963	0.997	0.999									
2016	0.963	0.995										
2017	0.957											
All pt	0.958	0.995	0.998	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
5 Yr Avg	0.962	0.996	0.998	0.999	1.000	1.000	1.000					
5 Yr Ex-Hi Lo	0.963	0.995	0.998	0.999	1.000	1.000	1.000					
Selected	0.963	0.995	0.998	0.999	1.000	1.000	1.000	1.000				
Age to Ult	0.956	0.992	0.997	0.998	0.999	0.999	1.000	1.000				

Sentinel Insurance Company

Commercial Auto

District of Columbia

Proposed Effective Date: 01/18/2020

Loss Development: Countrywide Uninsured Motorists (in thousands)

Capped at \$100,000

EXHIBIT 7

Sheet 4

ACC	@ 15	@ 27	@ 39	@ 51	@ 63	@ 75	@ 87	@ 99	@ 111	@ 123	@ 135	@ 147
<u>Year</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>
2007	4,418	8,947	12,998	14,415	15,125	15,243	15,418	15,423	15,418	15,418	15,443	15,443
2008	3,634	8,339	11,327	11,801	12,537	12,429	12,492	12,580	12,563	12,512	12,512	
2009	3,366	6,510	8,148	9,174	9,551	9,883	9,960	9,960	9,960	9,960		
2010	3,633	6,012	8,217	9,789	10,440	10,677	10,826	10,898	10,986			
2011	4,661	9,943	11,541	12,872	13,228	13,344	13,442	13,431				
2012	4,280	7,581	9,229	10,084	10,151	10,574	10,584					
2013	4,547	7,471	8,979	10,235	10,701	10,760						
2014	3,529	6,588	9,462	10,304	10,785							
2015	3,459	7,833	10,676	11,818								
2016	3,913	6,608	9,074									
2017	3,654	7,353										
2018	2,855											
ACC												
<u>Year</u>	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-87</u>	<u>87-99</u>	<u>99-111</u>	<u>111-123</u>	<u>123-135</u>	<u>135-147</u>	
2007	2.025	1.453	1.109	1.049	1.008	1.011	1.000	1.000	1.000	1.002	1.000	
2008	2.295	1.358	1.042	1.062	0.991	1.005	1.007	0.999	0.996	1.000		
2009	1.934	1.252	1.126	1.041	1.035	1.008	1.000	1.000	1.000			
2010	1.655	1.367	1.191	1.067	1.023	1.014	1.007	1.008				
2011	2.133	1.161	1.115	1.028	1.009	1.007	0.999					
2012	1.771	1.217	1.093	1.007	1.042	1.001						
2013	1.643	1.202	1.140	1.046	1.006							
2014	1.867	1.436	1.089	1.047								
2015	2.265	1.363	1.107									
2016	1.689	1.373										
2017	2.012											
All pt	1.935	1.318	1.112	1.043	1.016	1.008	1.003	1.002	0.999	1.001	1.000	
5 Yr Avg	1.895	1.318	1.109	1.039	1.023	1.007	1.003					
5 Yr Ex-Hi Lo	1.856	1.318	1.105	1.040	1.022	1.007	1.002					
Selected	1.856	1.318	1.105	1.040	1.022	1.007	1.002	1.000				
Age to Ult	2.899	1.562	1.185	1.073	1.031	1.009	1.002	1.000				

Sentinel Insurance Company

Commercial Auto

District of Columbia

Proposed Effective Date: 01/18/2020

Loss Development: Countrywide Personal Injury Protection (in thousands)

Capped at \$100,000

EXHIBIT 7

Sheet 5

ACC	@ 15	@ 27	@ 39	@ 51	@ 63	@ 75	@ 87	@ 99	@ 111	@ 123	@ 135	@ 147
<u>Year</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>	<u>Months</u>
2007	6,090	5,895	5,962	5,969	5,984	6,005	5,958	6,022	6,027	6,032	6,032	6,047
2008	4,596	4,885	4,999	5,058	5,015	5,083	5,128	5,155	5,155	5,155	5,155	
2009	5,603	6,102	6,300	5,839	5,895	6,121	6,135	6,137	6,139	6,142		
2010	6,931	7,575	6,058	5,647	7,219	7,206	7,202	7,169	7,185			
2011	10,285	6,814	5,495	11,215	10,724	10,715	11,434	11,611				
2012	5,130	5,938	10,742	10,723	10,695	10,956	11,217					
2013	5,051	7,156	7,586	7,848	10,263	10,168						
2014	3,592	4,121	4,239	4,411	4,404							
2015	4,785	5,869	6,138	6,187								
2016	4,369	5,243	5,726									
2017	3,147	3,713										
2018	3,304											
ACC												
<u>Year</u>	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-75</u>	<u>75-87</u>	<u>87-99</u>	<u>99-111</u>	<u>111-123</u>	<u>123-135</u>	<u>135-147</u>	
2007	0.968	1.011	1.001	1.003	1.004	0.992	1.011	1.001	1.001	1.000	1.002	
2008	1.063	1.023	1.012	0.991	1.014	1.009	1.005	1.000	1.000	1.000		
2009	1.089	1.032	0.927	1.010	1.038	1.002	1.000	1.000	1.000			
2010	1.093	0.800	0.932	1.278	0.998	0.999	0.995	1.002				
2011	0.663	0.806	2.041	0.956	0.999	1.067	1.015					
2012	1.158	1.809	0.998	0.997	1.024	1.024						
2013	1.417	1.060	1.035	1.308	0.991							
2014	1.147	1.029	1.041	0.998								
2015	1.227	1.046	1.008									
2016	1.200	1.092										
2017	1.180											
All pt	1.109	1.071	1.110	1.068	1.010	1.016	1.005	1.001	1.000	1.000	1.002	
5 Yr Avg	1.234	1.207	1.224	1.108	1.010	1.020	1.005	1.001				
5 Yr Ex-Hi Lo	1.202	1.066	1.028	1.091	1.007	1.012	1.005					
Selected	1.202	1.066	1.028	1.091	1.007	1.012	1.005	1.000				
Age to Ult	1.473	1.225	1.149	1.118	1.025	1.017	1.005	1.000				

The incurred losses in the experience are adjusted to smooth out the impact of random large claims. Actual excess losses are removed by capping individual claims at the limit specified above and replaced with expected excess losses.

An Excess Loss Factor (ELF) is calculated as the weighted average Increased Limit Factor (rescaled to a base of the limit specified above) for Liability coverage for each vehicle type. The ELF converts aggregate capped losses to aggregate total losses.

Expected excess losses expressed as a portion of expected total limits losses are given as $(\text{ELF} - 1)/(\text{ELF})$.

The ELF is converted to an Excess Loss Premium Factor (ELPF) applicable to manual earned premium at present rates. $\text{ELPF} = (\text{ELF} - 1)/(\text{ELF}) * (\text{Loss only permissible loss ratio})$

Vehicle Type	Percentage HIG Ult BL Inc Loss	Wtd Avg Increased Limit Factor (ELF)	Expected Excess Loss as a % of Total Premium	Permissible Loss Ratio (Loss Only)	Expected Excess Loss Prem Factor (ELPF)
TTT Total	65%	1.522	34.3%	51.5%	0.177
All Other Vehicles	35%	1.488	32.8%	51.5%	0.169

Policy Limit (\$000)	Light & Medium Trucks		All Other Vehicles	
	HIG Ult BL Inc Loss	Rescaled Increased Limit Factor	HIG Ult BL Inc Loss	Increased Limit Factor
100	2.6%	1.00	2.0%	1.00
250	0.0%	1.20	0.5%	1.19
300	3.1%	1.24	2.6%	1.23
400	0.3%	1.31	1.1%	1.30
500	7.4%	1.37	6.6%	1.35
750	0.3%	1.48	0.0%	1.45
1,000	85.7%	1.56	86.8%	1.52
1,500	0.0%	1.68	0.0%	1.63
2,000	0.6%	1.76	0.4%	1.71
2,500	0.0%	1.83	0.0%	1.77
3,000	0.0%	1.89	0.0%	1.82
5,000	0.0%	2.06	0.0%	1.98
7,500	0.0%	2.22	0.0%	2.12
10,000	0.0%	2.36	0.0%	2.23
TOTAL	100%	1.522	100.0%	1.488

Derivation of ELPF for Uninsured Motorists

Percentage of TTT HIGBL Inc Losses

A. Liability ELF for all vehicle types	1.51 Wtd avg Liab ELF for TTTs and All Other Vehicles
B. Liability ELPF for all vehicle types	17.4% $(A-1)/A \times [\text{Loss only PLR}]$
C. Differential between UM and Liability XS %	1.65 Estimate
D. Umbrella ELPF for all vehicle types	0.287 B x C

Sentinel Insurance Company
Commercial Auto
District of Columbia
Proposed Effective Date: 01/18/2020
Development Of Catastrophe Adjustment

Exhibit 9

Year	OTC Losses	OTC Ex-Cat Losses	OTC Cat Only Losses	Cat loss as a % of Ex-Cat Loss
1990	-	-	-	#DIV/0!
1991	-	-	-	#DIV/0!
1992	310	310	-	0%
1993	61,320	61,320	-	0%
1994	55,572	55,572	-	0%
1995	98,183	98,183	-	0%
1996	150,332	150,332	-	0%
1997	97,995	97,995	-	0%
1998	78,742	78,742	-	0%
1999	168,438	159,479	8,959	6%
2000	138,967	137,758	1,209	1%
2001	134,342	129,407	4,935	4%
2002	86,582	86,582	-	0%
2003	241,233	171,539	69,694	41%
2004	84,417	76,548	7,869	10%
2005	74,584	72,605	1,979	3%
2006	46,581	46,581	-	0%
2007	40,057	40,057	-	0%
2008	48,726	48,726	-	0%
2009	73,426	73,426	-	0%
2010	66,451	66,451	-	0%
2011	88,567	88,567	-	0%
2012	36,112	24,449	11,663	48%
2013	35,649	35,649	-	0%
2014	38,066	38,066	-	0%
2015	84,555	84,555	-	0%
2016	65,931	54,999	10,932	20%
2017	22,372	22,372	-	0%
All Yrs	2,117,510	2,000,270	117,240	6%

Selected Cat Loss adjustment Factor

1.06

State	Note
Colorado	This is a generic form that cannot be used for Colorado because Colorado is an exempt state
Washington	This form must be modified to incorporate the Deviation Table, which can be found in the prior LC Adoption filing, at the bottom of the Input worksheet

- Step 1 Review "Notes" worksheet for possible state specific guidelines
- Step 2 Update Link to your state indications file
- Step 3 Ascertain PIP status for your state from prior filing
- Step 4 Delete PIP worksheet(s) not in your state
- Step 5 Update PIP status in Sheets to Print
- Step 6 Ascertain UM status from prior filing
- Step 7-A If One (1) UM: Delete sheets "PPT UM" & "NotPPT UM"
- Step 7-B If Two (2) or more UM: Delete sheet "UM"
- Step 8 Update UM print status in Sheets to Print
- Step 9 Manually input info. wherever font is blue
- Step 10 For each worksheet-Place checkmark in appropriate Loss Cost Modification box (C9 or C10)
- Step 11 Ensure name of company & coverage on each worksheet is correct.
- Step 12 Hi-Light the worksheets that need to be printed
- Step 13 Choose File ->Print->Print Active Sheets

Sheets to Print			
Page1	YES	Publics LIAB	YES
TTT LIAB	YES	Publics OTC	YES
TTT OTC	YES	Publics COLL	YES
TTT COLL	YES	Garages	YES
PPT LIAB	YES	TTT PIP	YES
PPT OTC	YES	PPT PIP	YES
PPT COLL	YES	Publics PIP	YES
UM	YES		
PPT UM	YES		
NotPPT UM	YES		

Person Responsible for filing **Santhi Sulochanannair**

Title **Commercial Auto Actuarial**

Phone # **860-547-4538**

Line of Insurance **Commercial Automobile**

Rating Org. Ref. Filing # **CA-2016-BRLA1**

Company Box			
Code	NAIC #	Name	
1	11000	Sentinel Insurance Company, Ltd.	

Check One

Keep Modifiers on File ☐

Modifiers on File this Filing Only ☒

Input Company Code **1**

Date Filing Submission **1/14/2020**

Proposed Rate Level Change 6.1%

Proposed Effective Date 1/18/2020

*Prior Rate Level Change **6.2%** *Find in prior filing - Exhibit 1 Sheet 1

*Effective Date **1/12/2019** *Find in prior filing - Exhibit 1 Sheet 1

Vehicle Type	Coverage		Loss Cost Mod Factor	Prem. Level Change				
			Prop	Prop				
TTT	Liability / Medical Payments / Hired Auto Liability		1.750	4.0%				
	Other Than Collision		1.120	1.6%				
	Collision		1.000	7.3%				
	Personal Injury Protection		1.081	0.0%				
	Uninsured Motorists		1.700	2.9%				
PPT	Liability and Medical Payments		1.460	3.7%				
	Other Than Collision		1.300	3.8%				
	Collision		1.350	3.7%				
	Personal Injury Protection		1.173	0.0%				
	Uninsured Motorists		1.700	2.9%				
Publics	Liability and Medical Payments		1.000	14.2%				
	Other Than Collision		1.002	0.0%				
	Collision		1.002	0.0%				
	Personal Injury Protection		1.020	0.0%				
	Uninsured Motorists		1.700	2.9%				
Garages & Statewide Misc. Rates	PL&LAE/R		LC Mod Factor		LC Mod Change	Impact ISO Base LC Change	Prem. Level Change	
	Current	Prop	ELR Change	Current			Prop	Prop
	59.6%	60.8%		-0.020			1.000	1.020

Expense	Lia/UM	OTC	Coll	PIP
Commission	16.3%	16.3%	16.3%	16.3%
Other U/W	18.7%	18.7%	18.7%	18.7%
Tax,Lic,Fee	1.7%	1.7%	1.7%	1.7%
Profit	2.5%	5.8%	5.8%	2.5%
Total	39.2%	42.5%	42.5%	39.2%
PL&LAE/R	60.8%	57.5%	57.5%	60.8%

Date: 01/14/20

Space Reserved for Insurance
Department use

**INSURER RATE FILING
ADOPTION OF ADVISORY ORGANIZATION
PROSPECTIVE LOSS COSTS
REFERENCE FILING ADOPTION FORM**

1. INSURER NAME Sentinel Insurance Company, Ltd.

ADDRESS One Hartford Plaza

Hartford, CT 06155

PERSON RESPONSIBLE FOR FILING Santhi Sulochanannair

TITLE Commercial Auto Actuarial TELEPHONE # 860-547-4538

2. INSURER NAIC # 11000

3. LINE OF INSURANCE Commercial Automobile

4. ADVISORY ORGANIZATION Insurance Services Office, Ins.

5. ADVISORY ORGANIZATION REFERENCE FILING # CA-2016-BRLA1

6. The above insurer hereby declares that it is a member, subscriber or service purchaser of the named advisory organization for this line of insurance. The insurer hereby files to be deemed to have independently submitted, as its own filing, the prospective loss costs in the captioned Reference Filing.

The insurer's rates will be the combination of the prospective loss costs and the loss cost multipliers and, if utilized, the expense constants specified in the attachments.

7. PROPOSED RATE LEVEL CHANGE 6.1% EFFECTIVE DATE 1/18/2020

8. PRIOR RATE LEVEL CHANGE 6.2% EFFECTIVE DATE 1/12/2019

9. ATTACH "SUMMARY OF SUPPORTING INFORMATION FORM"
(Use a separate Summary for each insurer-selected loss cost multiplier.)

10. CHECK ONE OF THE FOLLOWING:

☐ The insurer hereby files to have its loss cost multipliers and, if utilized, expense constants be applicable to future revisions of the advisory organization's prospective loss costs for this line of insurance. The insurer's rates will be the combination of the advisory organization's prospective loss costs and the insurer's loss cost multipliers and, if utilized, expense constants specified in the attachments. The rates will apply to policies written on or after the effective date of the advisory organization's prospective loss costs. This authorization is effective until disapproved by the Commissioner, or amended or withdrawn by the insurer.

☒ The insurer hereby files to have its loss cost multipliers and, if utilized, expense constants be applicable only to the above Advisory Organization Reference Filing.

Insurer Name: Sentinel Insurance Company, Ltd.
NAIC Number: 11000

Date: 1/14/20

**INSURER RATE FILING
ADOPTION OF ADVISORY ORGANIZATION
PROSPECTIVE LOSS COSTS
SUMMARY OF SUPPORTING INFORMATION FORM
CALCULATION OF COMPANY LOSS COST MULTIPLIER**

1. Line, Subline, Coverage, Territory, Class, etc. combination to which this page applies:
Commercial Automobile: TTT Liability / Medical Payments / Hired Auto Liability
2. Loss Cost Modification:
A. The insurer hereby files to adopt the prospective loss costs in the captioned reference filing:
(CHECK ONE)

X

 Without modification (factor = 1.000)
With the following modification(s). Cite the nature and percent modification and attach supporting data and/or rationale for the modification.
75.0%
See supporting exhibits
- B. Loss Cost Modification Expressed as a Factor: 1.750
(See examples below.)

NOTE: IF EXPENSE CONSTANTS ARE UTILIZED, ATTACH "EXPENSE CONSTANT SUPPLEMENT" OR OTHER SUPPORTING INFORMATION. DO NOT COMPLETE ITEMS 3-7 BELOW.

3. Development of Expected Loss Ratio. (Attach exhibit detailing insurer expense data and/or other supporting information.)

		Selected Provisions	
A.	Total Production Expense	16.3	%
B.	General Expenses	18.7	%
C.	Taxes, Licenses & Fees	1.7	%
D.	Underwriting Profit & Contingencies	2.5	%
E.	Other (explain)		
F.	TOTAL	39.2	%

4 A. Expected Loss Ratio: $ELR = 100\% - 3F =$	60.8	%
4 B. ELR in decimal form =	0.608	

5. Company Formula Loss Cost Multiplier: $(2B \div 4B) =$ 2.878
6. Company Selected Loss Cost Multiplier = 2.878
Explain any differences between 5 and 6:

7. Rate level change for the coverages to which this page applies	4.0%

Example 1: Loss Cost modification factor: If your company's loss cost modification is -10%, a factor of .90 ($1.000 - .100$) should be used.

Example 2: Loss Cost modification factor: If your company's loss cost modification is +15%, a factor of 1.15 ($1.000 + .150$) should be used.

Insurer Name: Sentinel Insurance Company, Ltd.
NAIC Number: 11000

Date: 1/14/20

**INSURER RATE FILING
ADOPTION OF ADVISORY ORGANIZATION
PROSPECTIVE LOSS COSTS
SUMMARY OF SUPPORTING INFORMATION FORM
CALCULATION OF COMPANY LOSS COST MULTIPLIER**

1. Line, Subline, Coverage, Territory, Class, etc. combination to which this page applies:

Commercial Automobile: TTT Other Than Collision

2. Loss Cost Modification:

- A. The insurer hereby files to adopt the prospective loss costs in the captioned reference filing:

(CHECK ONE)

<input type="checkbox"/>
<input checked="" type="checkbox"/>

Without modification (factor = 1.000)

With the following modification(s). Cite the nature and percent modification and attach supporting data and/or rationale for the modification.

12.0%

See supporting exhibits

- B. Loss Cost Modification Expressed as a Factor:

1.120

(See examples below.)

NOTE: IF EXPENSE CONSTANTS ARE UTILIZED, ATTACH "EXPENSE CONSTANT SUPPLEMENT" OR OTHER SUPPORTING INFORMATION. DO NOT COMPLETE ITEMS 3-7 BELOW.

3. Development of Expected Loss Ratio. (Attach exhibit detailing insurer expense data and/or other supporting information.)

**Selected
Provisions**

A. Total Production Expense	16.3	%
B. General Expenses	18.7	%
C. Taxes, Licenses & Fees	1.7	%
D. Underwriting Profit & Contingencies	5.8	%
E. Other (explain)		%
F. TOTAL	42.5	%

4 A. Expected Loss Ratio: $ELR = 100\% - 3F =$	57.5	%
4 B. ELR in decimal form =	0.575	

5. Company Formula Loss Cost Multiplier: $(2B \div 4B) =$ 1.948

6. Company Selected Loss Cost Multiplier = 1.948

Explain any differences between 5 and 6:

7. Rate level change for the coverages to which this page applies	1.6%

Example 1: Loss Cost modification factor: If your company's loss cost modification is -10%, a factor of .90 ($1.000 - .100$) should be used.

Example 2: Loss Cost modification factor: If your company's loss cost modification is +15%, a factor of 1.15 ($1.000 + .150$) should be used.

Insurer Name: Sentinel Insurance Company, Ltd.
NAIC Number: 11000

Date: 1/14/20

**INSURER RATE FILING
ADOPTION OF ADVISORY ORGANIZATION
PROSPECTIVE LOSS COSTS
SUMMARY OF SUPPORTING INFORMATION FORM
CALCULATION OF COMPANY LOSS COST MULTIPLIER**

1. Line, Subline, Coverage, Territory, Class, etc. combination to which this page applies:

Commercial Automobile: TTT Collision

2. Loss Cost Modification:

- A. The insurer hereby files to adopt the prospective loss costs in the captioned reference filing:

(CHECK ONE)

<input checked="checked" type="checkbox"/>
<input type="checkbox"/>

Without modification (factor = 1.000)

With the following modification(s). Cite the nature and percent modification and attach supporting data and/or rationale for the modification.

0.0%

- B. Loss Cost Modification Expressed as a Factor:

1.000

(See examples below.)

NOTE: IF EXPENSE CONSTANTS ARE UTILIZED, ATTACH "EXPENSE CONSTANT SUPPLEMENT" OR OTHER SUPPORTING INFORMATION. DO NOT COMPLETE ITEMS 3-7 BELOW.

3. Development of Expected Loss Ratio. (Attach exhibit detailing insurer expense data and/or other supporting information.)

**Selected
Provisions**

A. Total Production Expense	16.3	%
B. General Expenses	18.7	%
C. Taxes, Licenses & Fees	1.7	%
D. Underwriting Profit & Contingencies	5.8	%
E. Other (explain)		%
F. TOTAL	42.5	%

4 A. Expected Loss Ratio: $ELR = 100\% - 3F =$	57.5	%
4 B. ELR in decimal form =	0.575	

5. Company Formula Loss Cost Multiplier: $(2B \div 4B) =$	1.739
6. Company Selected Loss Cost Multiplier =	1.739
Explain any differences between 5 and 6:	

7. Rate level change for the coverages to which this page applies	7.3%

Example 1: Loss Cost modification factor: If your company's loss cost modification is -10%, a factor of .90 ($1.000 - .100$) should be used.

Example 2: Loss Cost modification factor: If your company's loss cost modification is +15%, a factor of 1.15 ($1.000 + .150$) should be used.

Insurer Name: Sentinel Insurance Company, Ltd.
NAIC Number: 11000

Date: 1/14/20

**INSURER RATE FILING
ADOPTION OF ADVISORY ORGANIZATION
PROSPECTIVE LOSS COSTS
SUMMARY OF SUPPORTING INFORMATION FORM
CALCULATION OF COMPANY LOSS COST MULTIPLIER**

1. Line, Subline, Coverage, Territory, Class, etc. combination to which this page applies:
Commercial Automobile: PPT Liability and Medical Payments
2. Loss Cost Modification:
- A. The insurer hereby files to adopt the prospective loss costs in the captioned reference filing:
(CHECK ONE)
- ☐ Without modification (factor = 1.000)
- ☒ With the following modification(s). Cite the nature and percent modification and attach supporting data and/or rationale for the modification.
46.0%
See supporting exhibits
- B. Loss Cost Modification Expressed as a Factor: 1.460
(See examples below.)

NOTE: IF EXPENSE CONSTANTS ARE UTILIZED, ATTACH "EXPENSE CONSTANT SUPPLEMENT" OR OTHER SUPPORTING INFORMATION. DO NOT COMPLETE ITEMS 3-7 BELOW.

3. Development of Expected Loss Ratio. (Attach exhibit detailing insurer expense data and/or other supporting information.)

		Selected Provisions	
A.	Total Production Expense	16.3	%
B.	General Expenses	18.7	%
C.	Taxes, Licenses & Fees	1.7	%
D.	Underwriting Profit & Contingencies	2.5	%
E.	Other (explain)		%
F.	TOTAL	39.2	%

4 A. Expected Loss Ratio: $ELR = 100\% - 3F =$	60.8	%
4 B. ELR in decimal form =	0.608	

5. Company Formula Loss Cost Multiplier: $(2B \div 4B) =$ 2.401
6. Company Selected Loss Cost Multiplier = 2.401
Explain any differences between 5 and 6:

7. Rate level change for the coverages to which this page applies	3.7%

Example 1: Loss Cost modification factor: If your company's loss cost modification is -10%, a factor of .90 ($1.000 - .100$) should be used.

Example 2: Loss Cost modification factor: If your company's loss cost modification is +15%, a factor of 1.15 ($1.000 + .150$) should be used.

Insurer Name: Sentinel Insurance Company, Ltd.
NAIC Number: 11000

Date: 1/14/20

**INSURER RATE FILING
ADOPTION OF ADVISORY ORGANIZATION
PROSPECTIVE LOSS COSTS
SUMMARY OF SUPPORTING INFORMATION FORM
CALCULATION OF COMPANY LOSS COST MULTIPLIER**

1. Line, Subline, Coverage, Territory, Class, etc. combination to which this page applies:

Commercial Automobile: PPT Other Than Collision

2. Loss Cost Modification:

- A. The insurer hereby files to adopt the prospective loss costs in the captioned reference filing:

(CHECK ONE)

<input type="checkbox"/>
<input checked="" type="checkbox"/>

Without modification (factor = 1.000)

With the following modification(s). Cite the nature and percent modification and attach supporting data and/or rationale for the modification.

30.0%

See supporting exhibits

- B. Loss Cost Modification Expressed as a Factor:

1.300

(See examples below.)

NOTE: IF EXPENSE CONSTANTS ARE UTILIZED, ATTACH "EXPENSE CONSTANT SUPPLEMENT" OR OTHER SUPPORTING INFORMATION. DO NOT COMPLETE ITEMS 3-7 BELOW.

3. Development of Expected Loss Ratio. (Attach exhibit detailing insurer expense data and/or other supporting information.)

**Selected
Provisions**

A. Total Production Expense	16.3	%
B. General Expenses	18.7	%
C. Taxes, Licenses & Fees	1.7	%
D. Underwriting Profit & Contingencies	5.8	%
E. Other (explain)		%
F. TOTAL	42.5	%

4 A. Expected Loss Ratio: $ELR = 100\% - 3F =$	57.5	%
4 B. ELR in decimal form =	0.575	

5. Company Formula Loss Cost Multiplier: $(2B \div 4B) =$ 2.261

6. Company Selected Loss Cost Multiplier = 2.261

Explain any differences between 5 and 6:

7. Rate level change for the coverages to which this page applies	3.8%

Example 1: Loss Cost modification factor: If your company's loss cost modification is -10%, a factor of .90 ($1.000 - .100$) should be used.

Example 2: Loss Cost modification factor: If your company's loss cost modification is +15%, a factor of 1.15 ($1.000 + .150$) should be used.

Insurer Name: Sentinel Insurance Company, Ltd.
NAIC Number: 11000

Date: 1/14/20

**INSURER RATE FILING
ADOPTION OF ADVISORY ORGANIZATION
PROSPECTIVE LOSS COSTS
SUMMARY OF SUPPORTING INFORMATION FORM
CALCULATION OF COMPANY LOSS COST MULTIPLIER**

1. Line, Subline, Coverage, Territory, Class, etc. combination to which this page applies:

Commercial Automobile: PPT Collision

2. Loss Cost Modification:

- A. The insurer hereby files to adopt the prospective loss costs in the captioned reference filing:

(CHECK ONE)

<input type="checkbox"/>
<input checked="" type="checkbox"/>

Without modification (factor = 1.000)

With the following modification(s). Cite the nature and percent modification and attach supporting data and/or rationale for the modification.

35.0%

See supporting exhibits

- B. Loss Cost Modification Expressed as a Factor:

1.350

(See examples below.)

NOTE: IF EXPENSE CONSTANTS ARE UTILIZED, ATTACH "EXPENSE CONSTANT SUPPLEMENT" OR OTHER SUPPORTING INFORMATION. DO NOT COMPLETE ITEMS 3-7 BELOW.

3. Development of Expected Loss Ratio. (Attach exhibit detailing insurer expense data and/or other supporting information.)

**Selected
Provisions**

A. Total Production Expense	16.3	%
B. General Expenses	18.7	%
C. Taxes, Licenses & Fees	1.7	%
D. Underwriting Profit & Contingencies	5.8	%
E. Other (explain)		%
F. TOTAL	42.5	%

4 A. Expected Loss Ratio: $ELR = 100\% - 3F =$	57.5	%
4 B. ELR in decimal form =	0.575	

5. Company Formula Loss Cost Multiplier: $(2B \div 4B) =$ 2.348

6. Company Selected Loss Cost Multiplier = 2.348

Explain any differences between 5 and 6:

7. Rate level change for the coverages to which this page applies	3.7%

Example 1: Loss Cost modification factor: If your company's loss cost modification is -10%, a factor of .90 ($1.000 - .100$) should be used.

Example 2: Loss Cost modification factor: If your company's loss cost modification is +15%, a factor of 1.15 ($1.000 + .150$) should be used.

Insurer Name: Sentinel Insurance Company, Ltd.
NAIC Number: 11000

Date: 1/14/20

**INSURER RATE FILING
ADOPTION OF ADVISORY ORGANIZATION
PROSPECTIVE LOSS COSTS
SUMMARY OF SUPPORTING INFORMATION FORM
CALCULATION OF COMPANY LOSS COST MULTIPLIER**

1. Line, Subline, Coverage, Territory, Class, etc. combination to which this page applies:
Commercial Automobile: Publics Liability and Medical Payments
2. Loss Cost Modification:
A. The insurer hereby files to adopt the prospective loss costs in the captioned reference filing:
(CHECK ONE)
☒ Without modification (factor = 1.000)
☐ With the following modification(s). Cite the nature and percent modification and attach supporting data and/or rationale for the modification.
0.0%
- B. Loss Cost Modification Expressed as a Factor: 1.000
(See examples below.)

NOTE: IF EXPENSE CONSTANTS ARE UTILIZED, ATTACH "EXPENSE CONSTANT SUPPLEMENT" OR OTHER SUPPORTING INFORMATION. DO NOT COMPLETE ITEMS 3-7 BELOW.

3. Development of Expected Loss Ratio. (Attach exhibit detailing insurer expense data and/or other supporting information.)

		Selected Provisions	
A.	Total Production Expense	16.3	%
B.	General Expenses	18.7	%
C.	Taxes, Licenses & Fees	1.7	%
D.	Underwriting Profit & Contingencies	2.5	%
E.	Other (explain)		%
F.	TOTAL	39.2	%

4 A. Expected Loss Ratio: $ELR = 100\% - 3F =$	60.8	%
4 B. ELR in decimal form =	0.608	

5. Company Formula Loss Cost Multiplier: $(2B \div 4B) =$ 1.645
6. Company Selected Loss Cost Multiplier = 1.645
Explain any differences between 5 and 6:

7. Rate level change for the coverages to which this page applies	14.2%

Example 1: Loss Cost modification factor: If your company's loss cost modification is -10%, a factor of .90 ($1.000 - .100$) should be used.

Example 2: Loss Cost modification factor: If your company's loss cost modification is +15%, a factor of 1.15 ($1.000 + .150$) should be used.

Insurer Name: Sentinel Insurance Company, Ltd.
NAIC Number: 11000

Date: 1/14/20

**INSURER RATE FILING
ADOPTION OF ADVISORY ORGANIZATION
PROSPECTIVE LOSS COSTS
SUMMARY OF SUPPORTING INFORMATION FORM
CALCULATION OF COMPANY LOSS COST MULTIPLIER**

1. Line, Subline, Coverage, Territory, Class, etc. combination to which this page applies:
Commercial Automobile: Publics Other Than Collision
2. Loss Cost Modification:
A. The insurer hereby files to adopt the prospective loss costs in the captioned reference filing:
(CHECK ONE)
☐ Without modification (factor = 1.000)
☒ With the following modification(s). Cite the nature and percent modification and attach supporting data and/or rationale for the modification.
0.2%
See supporting exhibits
- B. Loss Cost Modification Expressed as a Factor: 1.002
(See examples below.)

NOTE: IF EXPENSE CONSTANTS ARE UTILIZED, ATTACH "EXPENSE CONSTANT SUPPLEMENT" OR OTHER SUPPORTING INFORMATION. DO NOT COMPLETE ITEMS 3-7 BELOW.

3. Development of Expected Loss Ratio. (Attach exhibit detailing insurer expense data and/or other supporting information.)

		Selected Provisions	
A.	Total Production Expense	16.3	%
B.	General Expenses	18.7	%
C.	Taxes, Licenses & Fees	1.7	%
D.	Underwriting Profit & Contingencies	5.8	%
E.	Other (explain)		%
F.	TOTAL	42.5	%

4 A. Expected Loss Ratio: $ELR = 100\% - 3F =$	57.5	%
4 B. ELR in decimal form =	0.575	

5. Company Formula Loss Cost Multiplier: $(2B \div 4B) =$ 1.742
6. Company Selected Loss Cost Multiplier = 1.742
Explain any differences between 5 and 6:

7. Rate level change for the coverages to which this page applies	0.0%

Example 1: Loss Cost modification factor: If your company's loss cost modification is -10%, a factor of .90 ($1.000 - .100$) should be used.

Example 2: Loss Cost modification factor: If your company's loss cost modification is +15%, a factor of 1.15 ($1.000 + .150$) should be used.

Insurer Name: Sentinel Insurance Company, Ltd.
NAIC Number: 11000

Date: 1/14/20

**INSURER RATE FILING
ADOPTION OF ADVISORY ORGANIZATION
PROSPECTIVE LOSS COSTS
SUMMARY OF SUPPORTING INFORMATION FORM
CALCULATION OF COMPANY LOSS COST MULTIPLIER**

1. Line, Subline, Coverage, Territory, Class, etc. combination to which this page applies:

Commercial Automobile: Publics Collision

2. Loss Cost Modification:

- A. The insurer hereby files to adopt the prospective loss costs in the captioned reference filing:

(CHECK ONE)

<input type="checkbox"/>
<input checked="" type="checkbox"/>

Without modification (factor = 1.000)

With the following modification(s). Cite the nature and percent modification and attach supporting data and/or rationale for the modification.

0.2%

See supporting exhibits

- B. Loss Cost Modification Expressed as a Factor:

1.002

(See examples below.)

NOTE: IF EXPENSE CONSTANTS ARE UTILIZED, ATTACH "EXPENSE CONSTANT SUPPLEMENT" OR OTHER SUPPORTING INFORMATION. DO NOT COMPLETE ITEMS 3-7 BELOW.

3. Development of Expected Loss Ratio. (Attach exhibit detailing insurer expense data and/or other supporting information.)

**Selected
Provisions**

A. Total Production Expense	16.3	%
B. General Expenses	18.7	%
C. Taxes, Licenses & Fees	1.7	%
D. Underwriting Profit & Contingencies	5.8	%
E. Other (explain)		%
F. TOTAL	42.5	%

4 A. Expected Loss Ratio: $ELR = 100\% - 3F =$	57.5	%
4 B. ELR in decimal form =	0.575	

5. Company Formula Loss Cost Multiplier: $(2B \div 4B) =$	1.742
6. Company Selected Loss Cost Multiplier =	1.742
Explain any differences between 5 and 6:	

7. Rate level change for the coverages to which this page applies	0.0%

Example 1: Loss Cost modification factor: If your company's loss cost modification is -10%, a factor of .90 ($1.000 - .100$) should be used.

Example 2: Loss Cost modification factor: If your company's loss cost modification is +15%, a factor of 1.15 ($1.000 + .150$) should be used.

Insurer Name: Sentinel Insurance Company, Ltd.
NAIC Number: 11000

Date: 1/14/20

**INSURER RATE FILING
ADOPTION OF ADVISORY ORGANIZATION
PROSPECTIVE LOSS COSTS
SUMMARY OF SUPPORTING INFORMATION FORM
CALCULATION OF COMPANY LOSS COST MULTIPLIER**

1. Line, Subline, Coverage, Territory, Class, etc. combination to which this page applies:

Commercial Automobile: Uninsured Motorists

2. Loss Cost Modification:

- A. The insurer hereby files to adopt the prospective loss costs in the captioned reference filing:

(CHECK ONE)

<input type="checkbox"/>
<input checked="" type="checkbox"/>

Without modification (factor = 1.000)

With the following modification(s). Cite the nature and percent modification and attach supporting data and/or rationale for the modification.

70.0%

See supporting exhibits

- B. Loss Cost Modification Expressed as a Factor:

1.700

(See examples below.)

NOTE: IF EXPENSE CONSTANTS ARE UTILIZED, ATTACH "EXPENSE CONSTANT SUPPLEMENT" OR OTHER SUPPORTING INFORMATION. DO NOT COMPLETE ITEMS 3-7 BELOW.

3. Development of Expected Loss Ratio. (Attach exhibit detailing insurer expense data and/or other supporting information.)

**Selected
Provisions**

A. Total Production Expense	16.3	%
B. General Expenses	18.7	%
C. Taxes, Licenses & Fees	1.7	%
D. Underwriting Profit & Contingencies	2.5	%
E. Other (explain)		%
F. TOTAL	39.2	%

4 A. Expected Loss Ratio: $ELR = 100\% - 3F =$	60.8	%
4 B. ELR in decimal form =	0.608	

5. Company Formula Loss Cost Multiplier: $(2B \div 4B) =$	2.796
6. Company Selected Loss Cost Multiplier =	2.796
Explain any differences between 5 and 6:	

7. Rate level change for the coverages to which this page applies	2.9%

Example 1: Loss Cost modification factor: If your company's loss cost modification is -10%, a factor of .90 ($1.000 - .100$) should be used.

Example 2: Loss Cost modification factor: If your company's loss cost modification is +15%, a factor of 1.15 ($1.000 + .150$) should be used.

Insurer Name: Sentinel Insurance Company, Ltd.
NAIC Number: 11000

Date: 1/14/20

**INSURER RATE FILING
ADOPTION OF ADVISORY ORGANIZATION
PROSPECTIVE LOSS COSTS
SUMMARY OF SUPPORTING INFORMATION FORM
CALCULATION OF COMPANY LOSS COST MULTIPLIER**

1. Line, Subline, Coverage, Territory, Class, etc. combination to which this page applies:

Commercial Automobile: Garages & Statewide Misc. Rates

2. Loss Cost Modification:

- A. The insurer hereby files to adopt the prospective loss costs in the captioned reference filing:

(CHECK ONE)

<input type="checkbox"/>
<input checked="" type="checkbox"/>

Without modification (factor = 1.000)

With the following modification(s). Cite the nature and percent modification and attach supporting data and/or rationale for the modification.

2.0%

See supporting exhibits

- B. Loss Cost Modification Expressed as a Factor:

1.020

(See examples below.)

NOTE: IF EXPENSE CONSTANTS ARE UTILIZED, ATTACH "EXPENSE CONSTANT SUPPLEMENT" OR OTHER SUPPORTING INFORMATION. DO NOT COMPLETE ITEMS 3-7 BELOW.

3. Development of Expected Loss Ratio. (Attach exhibit detailing insurer expense data and/or other supporting information.)

**Selected
Provisions**

A. Total Production Expense	16.3	%
B. General Expenses	18.7	%
C. Taxes, Licenses & Fees	1.7	%
D. Underwriting Profit & Contingencies	2.5	%
E. Other (explain)		%
F. TOTAL	39.2	%

4 A. Expected Loss Ratio: $ELR = 100\% - 3F =$	60.8	%
4 B. ELR in decimal form =	0.608	

5. Company Formula Loss Cost Multiplier: $(2B \div 4B) =$ 1.678
6. Company Selected Loss Cost Multiplier = 1.678
- Explain any differences between 5 and 6:

7. Rate level change for the coverages to which this page applies	0.0%

Example 1: Loss Cost modification factor: If your company's loss cost modification is -10%, a factor of .90 ($1.000 - .100$) should be used.

Example 2: Loss Cost modification factor: If your company's loss cost modification is +15%, a factor of 1.15 ($1.000 + .150$) should be used.

Insurer Name: Sentinel Insurance Company, Ltd.
NAIC Number: 11000

Date: 1/14/20

**INSURER RATE FILING
ADOPTION OF ADVISORY ORGANIZATION
PROSPECTIVE LOSS COSTS
SUMMARY OF SUPPORTING INFORMATION FORM
CALCULATION OF COMPANY LOSS COST MULTIPLIER**

1. Line, Subline, Coverage, Territory, Class, etc. combination to which this page applies:

Commercial Automobile: TTT Personal Injury Protection

2. Loss Cost Modification:

- A. The insurer hereby files to adopt the prospective loss costs in the captioned reference filing:

(CHECK ONE)

<input type="checkbox"/>
<input checked="" type="checkbox"/>

Without modification (factor = 1.000)

With the following modification(s). Cite the nature and percent modification and attach supporting data and/or rationale for the modification.

8.1%

See supporting exhibits

- B. Loss Cost Modification Expressed as a Factor:

1.081

(See examples below.)

NOTE: IF EXPENSE CONSTANTS ARE UTILIZED, ATTACH "EXPENSE CONSTANT SUPPLEMENT" OR OTHER SUPPORTING INFORMATION. DO NOT COMPLETE ITEMS 3-7 BELOW.

3. Development of Expected Loss Ratio. (Attach exhibit detailing insurer expense data and/or other supporting information.)

**Selected
Provisions**

A. Total Production Expense	16.3	%
B. General Expenses	18.7	%
C. Taxes, Licenses & Fees	1.7	%
D. Underwriting Profit & Contingencies	2.5	%
E. Other (explain)		%
F. TOTAL	39.2	%

4 A. Expected Loss Ratio: $ELR = 100\% - 3F =$	60.8	%
4 B. ELR in decimal form =	0.608	

5. Company Formula Loss Cost Multiplier: $(2B \div 4B) =$ 1.779
6. Company Selected Loss Cost Multiplier = 1.779
- Explain any differences between 5 and 6:

7. Rate level change for the coverages to which this page applies	0.0%

Example 1: Loss Cost modification factor: If your company's loss cost modification is -10%, a factor of .90 ($1.000 - .100$) should be used.

Example 2: Loss Cost modification factor: If your company's loss cost modification is +15%, a factor of 1.15 ($1.000 + .150$) should be used.

Insurer Name: Sentinel Insurance Company, Ltd.
NAIC Number: 11000

Date: 1/14/20

**INSURER RATE FILING
ADOPTION OF ADVISORY ORGANIZATION
PROSPECTIVE LOSS COSTS
SUMMARY OF SUPPORTING INFORMATION FORM
CALCULATION OF COMPANY LOSS COST MULTIPLIER**

1. Line, Subline, Coverage, Territory, Class, etc. combination to which this page applies:

Commercial Automobile: PPT Personal Injury Protection

2. Loss Cost Modification:

- A. The insurer hereby files to adopt the prospective loss costs in the captioned reference filing:

(CHECK ONE)

<input type="checkbox"/>
<input checked="" type="checkbox"/>

Without modification (factor = 1.000)

With the following modification(s). Cite the nature and percent modification and attach supporting data and/or rationale for the modification.

17.3%

See supporting exhibits

- B. Loss Cost Modification Expressed as a Factor:

1.173

(See examples below.)

NOTE: IF EXPENSE CONSTANTS ARE UTILIZED, ATTACH "EXPENSE CONSTANT SUPPLEMENT" OR OTHER SUPPORTING INFORMATION. DO NOT COMPLETE ITEMS 3-7 BELOW.

3. Development of Expected Loss Ratio. (Attach exhibit detailing insurer expense data and/or other supporting information.)

**Selected
Provisions**

A. Total Production Expense	16.3	%
B. General Expenses	18.7	%
C. Taxes, Licenses & Fees	1.7	%
D. Underwriting Profit & Contingencies	2.5	%
E. Other (explain)		%
F. TOTAL	39.2	%

4 A. Expected Loss Ratio: $ELR = 100\% - 3F =$	60.8	%
4 B. ELR in decimal form =	0.608	

5. Company Formula Loss Cost Multiplier: $(2B \div 4B) =$ 1.930

6. Company Selected Loss Cost Multiplier = 1.930

Explain any differences between 5 and 6:

7. Rate level change for the coverages to which this page applies	0.0%

Example 1: Loss Cost modification factor: If your company's loss cost modification is -10%, a factor of .90 ($1.000 - .100$) should be used.

Example 2: Loss Cost modification factor: If your company's loss cost modification is +15%, a factor of 1.15 ($1.000 + .150$) should be used.

Insurer Name: Sentinel Insurance Company, Ltd.
NAIC Number: 11000

Date: 1/14/20

**INSURER RATE FILING
ADOPTION OF ADVISORY ORGANIZATION
PROSPECTIVE LOSS COSTS
SUMMARY OF SUPPORTING INFORMATION FORM
CALCULATION OF COMPANY LOSS COST MULTIPLIER**

1. Line, Subline, Coverage, Territory, Class, etc. combination to which this page applies:

Commercial Automobile: Publics Personal Injury Protection

2. Loss Cost Modification:

- A. The insurer hereby files to adopt the prospective loss costs in the captioned reference filing:

(CHECK ONE)

<input type="checkbox"/>
<input checked="" type="checkbox"/>

Without modification (factor = 1.000)

With the following modification(s). Cite the nature and percent modification and attach supporting data and/or rationale for the modification.

2.0%

See supporting exhibits

- B. Loss Cost Modification Expressed as a Factor:

1.020

(See examples below.)

NOTE: IF EXPENSE CONSTANTS ARE UTILIZED, ATTACH "EXPENSE CONSTANT SUPPLEMENT" OR OTHER SUPPORTING INFORMATION. DO NOT COMPLETE ITEMS 3-7 BELOW.

3. Development of Expected Loss Ratio. (Attach exhibit detailing insurer expense data and/or other supporting information.)

**Selected
Provisions**

A. Total Production Expense	16.3	%
B. General Expenses	18.7	%
C. Taxes, Licenses & Fees	1.7	%
D. Underwriting Profit & Contingencies	2.5	%
E. Other (explain)		%
F. TOTAL	39.2	%

4 A. Expected Loss Ratio: $ELR = 100\% - 3F =$	60.8	%
4 B. ELR in decimal form =	0.608	

5. Company Formula Loss Cost Multiplier: $(2B \div 4B) =$	1.678
6. Company Selected Loss Cost Multiplier =	1.678
Explain any differences between 5 and 6:	

7. Rate level change for the coverages to which this page applies	0.0%

Example 1: Loss Cost modification factor: If your company's loss cost modification is -10%, a factor of .90 ($1.000 - .100$) should be used.

Example 2: Loss Cost modification factor: If your company's loss cost modification is +15%, a factor of 1.15 ($1.000 + .150$) should be used.